

REMARKS OF MR. CLEMENT.
Mr. Clement, of the Sterling Sirup Works,
 Kansas, said:
 Our works consist of two large boilers 16

Rent of land.....	\$65.00
Ploughing.....	25.00
Planting and cultivation.....	73.00
Harvesting.....	12.00
Cutting the cane.....	79.00
Hauling to mill.....	57.00
Transporting.....	10.00
Manufacturing same.....	348.50
Total expenses.....	\$671.80

Yield of cane on the twenty-five acres, 225½ tons. Average to an acre, 9 tons, or thereabouts. Number of gallons per ton, 13—there is a little slight fraction I didn't give. Average number of gallons per acre, 120.

I sold my sirup at 37½ cents net, making a total of \$1,125. The expenses deducted, \$671.80, left a profit of \$453.90 on my summer's work. A large part of that was just actual money I paid out for work done. It was not what I estimate my own labor to be—all of it; some of it was. I have reduced the same to the expenses of a single gallon, and the different items are:

here yielded 15½ tons of stripped cane, and about 250 gallons of molasses. I sold my molasses for 60 cents a gallon wholesale, and 75 cents at retail. I use defecators similar to those described here. I bring the juice to about 150 degrees, and then add lime nearly enough to neutralize the acid, but not quite enough; I then bring to a boil, then let it stand for a few minutes and skim, then draw off in a swing pipe, and evaporator in what is called a Wilhelm evaporator. I use my bag-

The Association adjourned to to-morrow morning, December 14th, 1882.

[TO BE CONTINUED.]

work well in hand and never let it drive you, but do the driving yourself.
CHAS. W. MURTFELDT.
Kirkwood, Mo.

about half of which was used to supply the home trade and the balance shipped East. This year, 1882, being an off bearing year, the crop is but 200,000 lbs.

The Shepherd.

Edited by R. M. Bell, Summerville, Texas county, Mo., to whom all matter relating to this department should be addressed.

Grub in the Head.

I have a flock of Shropshire sheep and they are dying with grub in the head. Can some one of your experienced flock-masters tell me how to cure it?

Irving, Ill.

The Dogs Again.

ED. RURAL WORLD:—I see much complaint made by sheep-raisers in your State about the ravages of dogs among sheep. You have laws which, if all men were honest, would be some protection to the sheep; but as all men are not, and as the poor, shiftless, thriftless inhabitants own the most dogs and almost never pay any taxes, least of all on the dogs they own, and as these dogs are usually but poorly fed if at all, they have to range about the neighborhood for their living and are usually the ones that do the sheep-killing, I would suggest a law something as follows:

Tax dogs one or two dollars per head per year for the benefit of sheep killed by dogs, as is now done in many States; issue badges to be worn on the collars of the dogs paying the tax; make it the duty of constables and road-masters to kill all dogs not having paid the tax 30 days after it is due. Let it be lawful for anyone to kill any and all dogs not wearing such badge, when found off on the premises of its owner. Such a law would be simple, clear and I think effective, especially the last provision, which I have underscored, and which is the milk in that cocoanut. It would reach and exterminate the dogs that never pay the tax, yet are the very ones that do most of the sheep-killing. This is what sheepmen want, and I think it would be a blessing to the whole country.

E. A. REITH.

Alton, Feb. 12, 1883.

Vermont Merino Breeders.

The annual meeting of the Vermont Merino Sheep-Breeders' Association was held at Middlebury, Vermont, Wednesday, Jan. 10, 1883. The following were elected officers for the year:

President—Milo B. Williamson, Middlebury.

Vice-Presidents—T. Brookins, East Shoreham; Sam'l James, Middlebury.

Treasurer—V. Rich, Richville.

Secretary—Albert Chapman, Middlebury.

Directors—Cyrus Jennings, Hubbardston; Fred H. Farrington, Brandon; H. C. Burwell, Bridport; John H. Sprague, Vergennes.

Committee on Pedigrees—J. J. Crane, Bridport; H. S. Brookins, Richville; W. R. Remple, Middlebury.

All of them, with one exception, were re-elections. The report of the secretary shows that the year past has been a very prosperous one for the association; 290 new members were added during 1882, making in all about 1,020 members.

The cash receipts during 1882 were \$3,663.83; the running expenses, \$2,926.86; advanced toward second volume, now in press, \$500; which, added to the running expenses, makes a total of \$3,426.86, leaving a balance to be added to the treasury—the present amount in the treasury being \$2,684.64. The membership fees for all but new members, amounting to \$1,450, were remitted at the annual meeting last year, and again this year, amounting to \$2,040. This is a practical dividend for the two years of about \$3,500.

The salary of the secretary was fixed at \$2,500 for 1883. During 1882 there were shipped to other States from the station at Middlebury over seven thousand Merino sheep for breeding purposes, being more than a thousand more than in 1881. The second volume of the register has been unexpectedly delayed, but is now being printed and will soon be ready to be delivered.

Sheep in the Barn-Yard.

We see many farmers who keep cows and young cattle, colts, sheep and swine, big and little, all in the same barn lot, and expect the cattle and sheep and colts to make their living from the straw stack. We want to record our vote against such an abomination. It is a most unprofitable and inhuman practice. But this note is a plea for the sheep especially. There are too many farmers who think sheep can live on nearly nothing. A bite of straw and no water, or a few dry stalks of fodder and a run to the straw stack, is considered the best care for sheep. We know of a farmer who saw others doing well with sheep. He bought a nice lot of Cotswold ewes, in the fall, as he had an abundance of fodder and lots of straw. The sheep were fat and in good fix when he turned them into his barn lot, 50x150, with a half a dozen cows and as many sows. There was not a dry spot in the lot most of the winter and spring, except close around the stack, and that the cows and sows usually occupied, while the poor sheep were pictures of discomfort, standing humped up where they could against fences. In a few weeks their fleeces were ruined, and the sheep poor, not worth one-half their cost in the fall.

The farmer put them out to pasture the 1st of April. Some of them scoured, and all of them moped about hungry and weak, since the little grass that appeared in the sheltered places was frozen and washy. The dogs came to their relief and ended their torture the latter part of April.

Now, that farmer says there is no money in sheep. We told him he had more in than he would ever get out until he learned how to care for them.

We think it is safe to say sheep should never be kept in the barn-yard among other stock.

If the farmer has no other lot for them in winter, he is not fixed to keep sheep. He might as well try to make his potato and garden truck thrive in a stock lot.

Sheep need, first, a clean dry place to lie down. They need a place to exercise, where there is no mud. They will not thrive in the mud, feed as well as one may. Long wools are especially impatient of mud and discomfort. They need better care than common sheep or fine wools.

A few good Cotswolds, comfortably kept, pay a better percent, than any other stock.

er stock. Left to rough it around a straw-stack and wade in the mud, they are the least profitable.

The fleeces of any sheep are badly injured around straw stacks. Long-wooled fleeces are more damaged than the downs or fine wools, since they are longer and more open, and catch more beads, chaff and straw.

We advise farmers who have no dry lot or shed for such sheep, to sell in the fall and quit the business until they are better fixed or have learned more about the nature of the stock they would handle.

There are few farmers who can handle successfully all classes of domestic animals. Let each give his best efforts to the kind he succeeds best with. It is quite desirable that the farmer, like any other business man, should know what branch of his business he fails in, and what he may succeed with. The farmer who thinks he can make sheep pay in a muddy barn-yard, around a straw-stack, does not realize how little he knows about a sheep.—Wool Grower.

The Shropshire is a mutton breed and producer of what is known as clothing or delaine wool. This sheep is possessed of strong constitutional vigor, produces a compact fleece, mature early, and has a beautiful form. It is claimed that they will do excellently well in large flocks, and the ewes are very prolific, producing, it is said, 40 per cent of twins.

The ewes make good mothers, giving plenty of milk, and are careful. Those who have tried them speak of them in unbounded praise, and it is the opinion of even some of the breeders of other kinds of sheep that the Shropshire is worthy of a place among the best.

FEEDING SHEEP IN WINTER.—An excellent grain ration for breeding ewes may consist of one pint daily of a mixture of one bushel each of corn, rye, oats, buckwheat and bran. The mixed food is better for the sheep than any one grain, and they do not tire of it. Sheep are given to change and are somewhat restless in disposition, and desire a change of food, and the change improves their appetite. For fattening sheep corn and bran would be the best because fat is wanted, and this corn will supply; bran is added to make variety and to induce the sheep to eat and digest more of the corn. A fattening animal does well in proportion to the quantity of food it can be induced to consume and digest; but a breeding animal should be fed differently, because all that is required is to keep the animal in healthful condition and support the fetus.—Farmers' Advocate.

The Pig Pen.

Meat Hogs.

The present high price of hog products of all sorts, and its prospective continuance through another year, makes it wise in every farmer to kill this winter every pig that can be made to weigh from eighty to a hundred pounds. Even under ordinary circumstances it is not good policy to carry over hogs till they are eighteen months or two years old. A nine-month pig that will net 150 pounds of pork makes cheaper bacon than an eighteen month or a two year old hog that will make 200 or 250 pounds. According to our own experience, pigs littered about the first of March and butchered about the next December or January make the cheapest and best meat for family use. They have then lived through only a part of the winter season. A very good rule is to kill every thing that will weigh 80 pounds, excepting a sufficient number of breeding animals. This rule is also applicable to cattle that may be in good condition for beef at the beginning of winter and are of no special value as milkers. A very common practice with dairymen at the north is to "dog off" a cow of only ordinary milking qualities and convert her into beef. It is certainly poor management to let a cow or hog once fat become poor.

Illnesses of Swine.

Cleanliness, good feed and regularity in feeding tend to develop the pigling into the proportions—frightful to the eyes of many—which ensures a prize at our agricultural fairs. We rather admire the cleanly-fed pig, not overburdened with fat. Disease, and then appears amongst these animals. A frequent cause of death is perhaps the hand of the owner, or of some wise man, who, should the pig seem out of sorts, tries his hand at giving it a dose of castor oil, when, as in the process of shearing such an animal, he gets "more noise than wool," as a few loud screams precede the effects of the physic, which far more frequently kills than cures. There is no animal so easily choked by food, and there are undoubtedly many cases in which men have poured mixtures fearlessly into the mouth of a screaming pig, but only to feel the poor animal stretched lifeless at their feet. As a useful purgative for pigs we may mention a couple of croton beans, bruised and mixed with the food. Nitre and sulphur are amongst the remedies of service, and easily administered in food. Just as all diseases in the dog are called distemper, many of those of the horse are termed influenza, and a large number of cattle are at once declared to be hollow born or tail ail; so are the plurality of diseases in the pig called cholera. Moderation in feeding, and perhaps an occasional dose of medicine, are as essential for the health of the pig as for that of other domestic animals.—California Spirit of the Times.

The Hog of the West.

Before the National Convention in Washington this week, Dr. Ezra Stetson, of Neponset, Ill., long one of the most successful breeders of swine in the West, read a paper upon "The Hog of the West," of which the following is a part:

All intelligent breeders know how easy it is at this day to mould the size, shape, color and fattening qualities of swine. From the *Indicus* we get the streak of lean, and from the *sus Apis* the streak of fat. The blending of the blood of these two species has revolutionized the swine of our day, as well as the markets for their products.

The hog of the West must be black, or very nearly so, to present anything like a cleanly appearance, as well as to guard against mange or other diseases of our climate. He must also be well coated with hair to withstand the rigors of our latitude. He should have hardness of

constitution with an aptitude to take on flesh and fat at any age. Furthermore should possess a quiet and peaceful disposition. Even a hog has a disposition, and breed out as many devils as we may, a hog he is and a hog he will always remain.

In the West all of the breeds of improved white hogs of England have had their advocates, have been thoroughly tried and discarded. The same may be said of the white breeds said to have originated in America, as the Chester Whites of Pennsylvania and the Victorias of Indiana. The Jefferson County hog of New York is simply the improved Cheshire of England. All of these have had their day, but cut no figure now at our great packing establishments.

Of the English black breeds the improved Essex and the Berkshire have been widely disseminated and have found hearty admirers. All mankind are lovers of the symmetrical, and when well bred and well fed, the Berkshire is the beau ideal of the esthetic (no allusion to Oscar Wilde) swine fancier. Stripped of two of their most objectionable features this breed of swine would stand at the head of hogdom. Their restless disposition and proneness to reversion is acknowledged by all who have proved them, except it be parties who laud them for sinister purposes. We all remember Peter Pinard's razors which were made only to sell, and then not on the open market. The Berkshire breed has been improved by crossing with the Essex, and the Essex improved by crossing with the Neapolitan, and the Neapolitan in turn by the Turkish. Unless most carefully bred, as well as fed, the Berkshire will in a few generations revert to the Neapolitan, with no hair and no wool. The disposition of the Grand Turk never has been and never can be eradicated.

Hog Notes.

In Great Britain barley is chiefly used for fattening hogs. In Canada all the small grains except wheat, peas and oats largely take the place of corn. In the New England States a little corn is used in connection with potatoes, apples, pumpkins and mill-feed. A variety of food given to hogs appears to produce meat of fine flavor.

The practice with many of discarding old sows, and filling up from the young litter, is very unwise, provided the dams are of equal merit and breeding with the pigs. If, however, a young sow be kept till she is a year old, well fed in the meantime, before being bred, she will bring as strong and growthy pigs as the older sows. The notion that a sow should be bred early, that she should become a good suckler, is erroneous. Maturity in growth of the whole body is quite necessary to the development of the milk glands, and, as we have proved to our own satisfaction by sufficient tests, the well nourished sow, dropping her first litter at sixteen months, will, as stated, bring as good pigs as the older sows, and is quite as likely to have an ample supply of milk.

I have seen salt fed to hogs for more than fifty years, and in the last twenty years have fed many heavy hogs, ranging from 300 to 600 pounds net. I fed them all liberally with salt; have never lost one nor has one been sick an hour. These hogs have been fattened in a close pen, and their principal food was corn. I have salted at least once a day. Sometimes my hogs would fail to clean out their trough, in that case I would put handful of salt into my bucket, with some water, pour it into their trough, and they would lick it up with much relish. In addition to the salt, I feed coal from the stove. I make it a regular custom to feed coal, and it is astonishing what a quantity a hog will eat, and how healthy and robust it will make him. The hogs have plenty of salt and charcoal, and we shall hear less of the cholera.—Southern Farmer.

As a rule the pig is reared for the money that is in him. We may talk about cheap meats for the million as a necessity justifying the rearing of the swine, and persuade ourselves that the man is excusable who at this day places before his fellow men, as an article of diet, that which in olden times was rejected by honored people as unfit for human food. Little difference, however, does it make to the man thus excused, whether we think of him as a philanthropist or as one engaged in leading mankind astray, so long as he has a fair profit on the pigs he rears, or on the pork products he can place on the market. If there were no money for him in the breeding and rearing of hogs he would not engage in the business. We find, however, that in nearly every farmer and cottager, in the land there is a profit in pig raising, and so long as such is the case, we may expect to see this among the leading industries in civilized America.

The rapidly-growing interest in swine breeding in the United States shown by the late census returns. According to these there were on farms, in June, 1880, 47,683,951 hogs, the rate of increase since 1870 being ninety per cent., while the rate of increase in population during the same time was only thirty per cent. The census returns show also that nearly two-thirds of the hogs in the United States in 1880 were in the five States of Iowa, Illinois, Missouri, Indiana and Ohio. With facts and figures such as these at hand it is not surprising that the live-stock and agricultural papers, particularly that of the West, should devote more attention than formerly to swine husbandry, and that public records of breeding stock should be established and sustained; nor, on the other hand, that all parties interested in swine breeding should more eagerly avail themselves of every means calculated to aid in the successful prosecution of this work.—Breeder's Gazette.

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cash yearly, and pays, when properly bred and cared for, better dividends than bank stock, government bonds, or any other investment, in proportion to the capital invested or labor expended.

America has on her border a little State, fossiliferous if not fossil, which is now trying to come to the fore with its red hogs. They are genuine descendants of the old Tamworths or Berkshires of a time long gone. No claim has ever been or ever can be made that this breed has been improved—this can be brought about only by their examination. They are a relic of a bygone age, and an exemplification of the old truth that history repeats itself. In my boyhood days these hogs were uncommon, and they look to me like an untimely resurrection.

This swine of the West at the present time and, it is reasonable to predict, also of the future, are largely of the breed now known as Poland-China—a name as unpoetical and outlandish as can well be imagined; but, if, as the poet tells us, a rose by any other name would smell as sweet, a hog may be none the worse because he is called by a bad name.

In the light of modern science, as well as of practical swine-growing, the origin of this breed is perfectly plain. At the beginning of this century, when the inhabitants of the fertile Valley of the Ohio and its tributaries found they could raise corn (maize) in such quantities, and so little labor they set themselves to work on a new factor for the utilization of their surplus grain. Converting this corn into whiskey and then drinking the whiskey was scarcely a consonance with the principles or religious tenets of a community of Shakers on the Miami River, at Union Valley, in Butler county, Ohio. As early as 1816 a hog known by them as the Big China was taken by them from Philadelphia, and crossed on their then existing breeds. This is the first instance of which we have evidence of the *sus Indicus* blood being taken west of the Alleghany Mountains. At that time, and for some years after, Cincinnati was known as Porkopolis. The nearness of the market gave an impetus to swine-breeding, and urged the hog-breeder to seek to produce a breed which would make the greatest possible number of pounds of pork to the bushel of corn. It was soon learned that the Butler County hog, as he was originally called, filled the bill.

Walker St., Baltimore, Dec. 1881. For six years I have been a great sufferer from Blood Disease, Indigestion, Peppia, and Constipation, and became so debilitated that I could not retain anything on my stomach, in fact, life had almost become a burden. Finally, when hope had almost left me, my husband seeing Brown's Iron Bitters advertised in the paper, induced me to give it a trial. I am now taking the third bottle and have not felt so well in six years as I do at the present time.

Mrs. L. F. GRIFFIN.

BROWN'S IRON BITTERS will have a better tonic effect upon any one who needs "bracing up," than any medicine made.

Hens like other farm stock respond to care, attention and comfort, and the response is not a doubtful one either. From twenty-five to thirty-five cents per dozen is now being paid in this city for eggs, and spring chicken will at a very early day sell for at least fifty cents per head.

With these facts and figures in mind, is it not evident to every farmer and to every farmer's wife that it pays to keep and care for poultry as well if not better than for any other kind of farm stock when the labor involved and the capital invested are considered.

Just now the flocks may be fed all the scraps from the kitchen, all livers, lungs and other offal from slaughtered animals. Indeed pretty much anything that will take the place of the insects they gather in summer. Many such things may be cooked, indeed the bulk of them ought to be, to avoid souring, which is pretty sure to ensue if too much raw meat is fed. In the mess may be judiciously added corn meal, bran, middlings, peppers and a very little salt.

The dust bath may be made for them now to considerable advantage, for they cannot find it in their pens or houses. It may be made of coal or wood ashes, placed in a box near to their houses or haunts,

Horticultural.

Southern Illinois for Peaches.

Parker Earle in the *Farmer and Fruit-Grower* says: In response to your request I submit a few suggestions as to the adaptation of Southern Illinois for peach growing. Your older readers will remember that the great reputation of our part of the State as a fruit district, was first made about twenty years ago, on the remarkably fine crops of peaches then produced. The first peach orchards about Cobden were planted some twenty-five years ago; and it is safe to say that the earlier crops from these trees were never surpassed for size, beauty, and excellence of quality, by the same varieties of fruit grown anywhere in the world. They attracted great attention. The fame of these peaches was wide-spread; and it was claimed by many—and I think correctly—that the hills of Southern Illinois were the finest peach lands on the face of the globe. Immigration was stimulated; the price of land advanced rapidly; peach orchards were the ambition of every new comer, and of every old resident who was easily enthused. Within a few years our region became one of the three great centers of peach production in the United States. We sent our crops to market in entire train loads.

But it soon became apparent that we had overdone the business. The markets we could reach with our peaches in good condition were much fewer and smaller than they are to-day, and they were over-supplied. Prices were low for several years, and instead of the fortunes which seemed to be promised when the orchards were planted, growers made scarcely living profits. Discouragement took the place of enthusiasm; neglect followed; insects multiplied; hard winters came; the trees became enfeebled; the business became demoralized; and to-day this famous peach region produces only about a tenth of the amount it did a dozen years ago; while the available markets have increased four-fold.

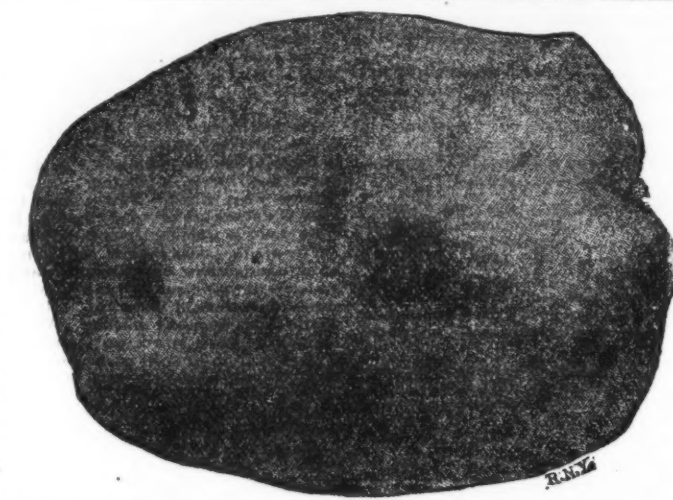
Our experience in this matter has not differed materially from that of other fruit-growing communities. The producers of all very perishable crops always have been and always will be subject to serious fluctuations of fortune. This is in the nature of such a business. Very high occasional prices stimulate excessive production; prices go below a paying figure, the mass of producers turn to some other business; and so the great waves of production ebb and flow. Strawberry culture has had a similar history among us, two or three times repeated. We have learned that there is in all things a limit to profitable production. The orange planters of Florida are just now in the same stage of towering enthusiasm which controlled the peach men of twenty years ago. They say, and undoubtedly believe, that the orange market can never be over-supplied. But time will demonstrate the foolishness of this fancy, if planting goes on long at the present rate.

But what is the outlook for Southern Illinois peach growing? It seems to me that the conditions of success were never really so good as they are now. Fine peaches can now be grown so easily as they were twenty years ago. Our soils are older and waste more rapidly under culture. Our climate has changed somewhat owing to the extensive destruction of our forests. The insect difficulties, especially the curculio, have greatly increased. But we understand varieties and the management of orchards far better than we did; and the great question of a sufficient market has wholly changed for western growers. In the East it is probable that the production of peaches has kept up with the growth of markets, and possibly has got ahead; but in the West the absolute production of peaches is much less than half what it was a dozen or fifteen years ago, while the markets have at least quadrupled in capacity. It is true that Delaware and Maryland peaches are often sent west in large quantities, but rarely in fine condition; and they could not compete at all with choice peaches grown here.

As a matter of fact, the vast demand of the rapidly increasing millions of western people for peaches must be supplied mostly by western growers, or not supplied at all. Where are these peaches to come from? In present market conditions many peaches are grown in the West as could be used at a paying price. I cannot see that the production is increasing. Until very recently it has been decreasing. Now there is nowhere a better peach soil than in our and adjoining counties; and I think I could state it stronger than that. There is nowhere in the West, except on the east shore of Lake Michigan, a better peach climate than we have; and that statement can be emphasized too. And there is no section of country, East or West, better situated geographically for easy access to the best markets in all directions; or that has superior railroad facilities for reaching them. Why then should we not have a revival of peach culture? I am strongly impressed that the right time has come. But have the right men come? I would not say a word that could influence the planting of one peach tree by any person who intends to let it grow and fruit in the old slip-shod fashion. Above all, the horticultural things, a neglected peach orchard, uncultivated, unpruned, and "unbugged" is an unprofitable investment, and a neighborhood nuisance. We have plenty of such now. But the thorough orchardist, who has a full comprehension of the wants of a peach orchard, and the capital and energy to carry out a proper system of culture, has an opportunity now on our hills for a very profitable business.

Fruit Buds of the Peach.

The cold weather which prevailed over the country about the 10th ult., was marked with various degrees of severity in different localities, from zero to thirty or forty below. In very rare instances we have known a portion of the peach crop to escape destruction when the thermometer had gone to seventeen degrees below zero, but more commonly all have been killed at twelve below. When, therefore, the thermometer went to twelve below at Union Springs, N. Y., on the morning of the 10th, we began to cast about to see what other fruits could be made to take the place of peaches the coming season, and were agreeably surprised since to find on examining one or two hundred buds that not more than one-seventh had been fatally injured, the remaining large portion being fresh and entirely unharmed. There was very little difference in the sorts examined,



Above will be found an illustration of the New Brush Potato, offered by J. M. Thorburn & Co., of New York. It is hardly necessary for us to say that the above named firm must be more or less familiar to every family in the land which takes the least interest in the flower or vegetable garden. The new potato to which they invite public attention at this time must be well worthy of trial or this firm would never place it in their list of specialties. It comes to them very highly recommended from reliable parties.

and no preference could be discovered in the buds on large, stout shoots, or on small and slender ones, or on exposed or sheltered sides of the shoots. The only exception was in the case of the Early Crawford, which had about one-third of the buds killed, but this may have been owing to peculiar aspect, the tree standing on the west side of a building. A reason for the unusual escape of the buds was doubtless the continuous cold weather which has prevailed since the close of autumn, and which has prevented the buds from swelling and becoming more susceptible to injury. We never saw them less swollen at this time of year; in some years they have been found twice as large, and when this has been the case, a cold of eight or ten degrees below zero has killed nearly all. Should several warm days still occur, followed by as severe a temperature as we have already had, we should probably lose the entire crop. These remarks apply to a single locality only, and only a few miles distant varying results are often observed. The danger still continues for some weeks, but after the first of March we have never known the crop to be destroyed, except in a single instance, about the sixth of that month.—J. J. Thomas, in *Country Gentleman*.

Planting Apple Orchards.

So much attention has of late years been given to the delicate fruits such as pears, grapes, etc., that the planting of apple orchards has in some places been placed in the background. Apple trees are more easy to raise and more rapid of growth and yield more abundantly than pear trees; they are less liable to blight, and comparatively little skill is required in selecting them and packing them for market. In other words, they are better adapted to a large wholesale business. They require less cultivation, pruning, pinching, thinning and training than grapes. The large landowner may therefore safely plant extensive orchards. For the past fifty years, notwithstanding the great number of orchards that have come into bearing, the price of apples has not fallen; and with the present rapid increase of city population, and of consumers generally, it is not probable that the market will be overstocked except in abundant years, and even then the best cultivators and the best packers who have attained a reputation will sell readily all they have. Orchards generally have been neglected; they have been planted on hill-sides, stony lots and other places where they cannot be properly cultivated, and a large number of those planted on good level land have been entirely neglected; as a consequence, they have grown feebly, and produce small crops with much imperfect and knotty fruit. If cultivated when young, receiving half the attention that farmers generally give their corn fields, the quantity and quality would both be improved and the profits greatly augmented. By selecting the most productive of the good standard varieties, each tree will certainly yield an average of ten to fifteen bushels at a moderate estimate, and under good treatment twenty, thirty and even forty bushels from each tree are not unusual in favorable seasons. Forty trees will occupy an acre, and ten bushels from each will be 400 bushels per acre. A twenty-five acre orchard will at this rate afford 10,000 bushels which at only ten cents per bushel the average price (at this time it is twice that), will be \$5,000—raised with one-half the labor that would be expended on a corresponding field of corn, for the only expense would be a moderate cultivation and gathering the crop. To plant these 25 acres would require 1,000 trees. By going to the nursery they can be procured for from ten to fifteen dollars per hundred and guaranteed true to name and of best class. To plant these 25 acres it will cost to hire all the labor, say about seventy-five dollars at the usual wages in the country. The cultivation of the orchard for several years might be accompanied with crops of potatoes, beans and corn, and could thus detract for the time but very little from the value of the land, until the increasing crops of fruits would afford a better return. So long as all mankind are fond of good fruit, they will supply themselves if they can at moderate prices; the market, therefore, will never cease; but if it should, the crop will still be eminently valuable to the farmer; 400 bushels apples per acre without planting or hoeing are better for feeding domestic animals than 150 bushels of potatoes or 50 bushels corn, requiring every year planting and hoeing. Large barn cellars may be made for storing apples in quantity and the surplus above what is sold, made into cider or vinegar or fed during the fall or winter to cattle and horses.—Orange Co. Farmer.

Horticultural Notes.

We have advices from a great number of fruit, producing sections south of this latitude, regarding the peach and other fruits, and it appears no serious damage has been inflicted by the late severe weather. Touching this matter we have letters of recent date from Southern Illinois, Tennessee, Arkansas, Mississippi, Alabama, Louisiana and Texas. We believe that few, if any, live peach

buds will be found this season north of St. Louis. Southern Illinois appears to be the only section of the State that survived the severe weather. The strawberry and apple crop everywhere will probably be as large as the average supply, for the only serious danger to them is that of a hard freeze in Spring.

The time for spring work is fast approaching, and every farmer should see that implements are in shape. If a plow needs sharpening, now is the time to get it done. See that everything is in readiness, so that when spring comes, all delays will be avoided. One day in the spring is worth a half dozen now to the farmer.

The clusters of eggs that may be found on apple tree limbs should be picked off during open weather in the winter, and thus prevent the hatching of the tent caterpillar. The eggs appear to be varnish-like, but such is not really the case, since a slight coat of varnish or oil would destroy their vitality by excluding the air.

The chestnut is a tree which a writer advises Americans to plant. It grows more rapidly than the oak, and the timber is equally valuable, and the nuts are always in demand. When gathered for planting they should be covered with sand or placed in the ground before they get hard and dry. They should be sown deeper than acorns, say from two to three inches.

Men have gone from the farm into places of trust, the highest to be found in the government of a great nation. From the cabin of the West, from the tow-path of the canal, the greatest men of the age have gone to the highest positions. These men, without exception, have been lovers of books and have been successful, because they have been educated. There is a genuineness about the freedom of farm life that tends to develop the best elements of human character.

At this season, when the vines are at rest, grape cuttings may be made and buried in the soil, or even planted. They are prepared as follows: Cut the vines into lengths half way between the eyes, leaving two eyes upon each. Set these in rows in the soil in a sloping direction, so that the upper eye is just at the surface. Cover the rows with leaves or litter and leave them. The cutting will probably have formed roots by spring. Let them grow where they are for a year, and then transplant them to their permanent places.

Fruit growers in this immediate vicinity report that the severe cold winter has killed all peaches and cherries, and that they are unable to state whether berries are injured or not. Vintners on the west bank of the Mississippi say that all varieties of fancy grapes are winter killed, while the Concord bids fair to make an excellent crop. On the east bank of the river the Nauvoo and Warsaw grape growers report all varieties nearly if not quite destroyed.—Keokuk Daily City.

J. S. Woodward has an article in the *New York Tribune* on storing apples, in which he says that "all things considered, there is no way of keeping apples quite so good and practicable as packing in tight barrels and storing in cool cellars; the barrel forms a room within a room and prevents circulation of air and consequent drying and shrinking of fruit, and also lessens the changes of temperature, and, besides, more fruit can thus be packed and stored in a given space than in any other way. The poorest of all ways is the large open bin."

A. M. Purdy says: Persons who have glass houses will gain much with high-priced new sorts of strawberries, raspberries, blueberries, grapes, etc., by starting them early in such, and when settled warm weather comes on, transfer them from the pots with the earth to the open ground. In this way, they will make a much larger growth, and give double the increase of plants and roots next season, than if set out doors late in Spring. A dozen new kinds of strawberry plants started in a green-house or hot-house and transferred, will increase to 300 to 500, and even 1000 the first year.

The Country Gentleman considers it well known that "wiring or girdling grape-vines, while it injures the vines, causes the grapes to grow larger, ripen sooner, and become poorer in quality. Some experiments were made at the Massachusetts Agricultural College in girdling surplus branches, which were to be afterward cut away. A revolving knife cut rapidly a ring of the bark, a fourth of an inch wide, just below the bunch of fruit, about midsummer. This treatment was

performed on twelve rows of grapes. The enlarged and early fruit sold for \$36 more than the same amount of the common or main crop, the labor being less than half this sum. No injury has been apparent to the vines so treated, the girdled canes being cut away when done with. If, however, many surplus canes were girdled on a vine, an obvious injury would doubtless be the result."

It is urged that "an almost universal fault on farms and in gardens is a want of care as to keeping tools in working order. Pruning knives and shears are laid aside with the gum or wet sap upon them, and without oiling; and when next wanted they work stiff, cut badly, and the effort to use them strains the joints so that they are almost useless, while with slight, timely care they would do perfect work for a life-time. In some light, adhesive Western soils it becomes an absolute necessity to keep plows bright, or they cannot be used a second time at all. A pot of lard or oil, with a little resin dissolved in it, affords these an ever-lasting varnish, which, applied to the surface, polished by use, keeps it bright for any length of time by excluding air and moisture. In heavier soils it suffices to wipe the surface till clean and dry; and two or three strips of old rug should be hung at every tool-house door for that important use."

Robert Bulst, Jr., of Philadelphia, says of potatoes: "If you wish large, well-formed roots do not plant small ones; always select the best, cut them into four or six pieces, according to size, preserving as many eyes on each as possible. You will then have strong, healthy vines and roots. If small tubers are planted whole, the result in general is a quantity of small vines, followed with an over-proportion of small potatoes. Many cultivators in this vicinity select good, formed tubers and plant them whole. This may be an advantage should the season prove to be very dry, but I look upon it as a great waste of time and space, for the quality of a crop is no better than that grown from well-formed tubers cut into sets."

The Women's Silk Culture Association of the United States have, it is stated, been making a thorough test of silk raised on the Osage orange leaves, and their report testifies that the quality of the silk is equal in all appearance to the Italian silk. Also that they see no difference in the dyeing and weaving from other silk. Osage orange is so plentiful in all parts of the United States, the plant having long been used extensively as a hedge plant and being of rapid growth, that many persons will be enabled by it to engage in silk culture who could not were they obliged to depend on mulberry for food for the worms. The hatching of the eggs can be kept back until leaves are ready by keeping them at a tolerably uniform temperature of from forty to fifty degrees.

No farmer can afford to get along without a patch of land devoted to the cultivation of blackberries, raspberries, currants, grapes, strawberries, etc. A good idea is to have a fruit garden near the house, where it may be of easy access to the women folks, and let it contain a few early apple trees, several kinds of cherries, peaches, pears and plums, a few grape vines, some quince, currant and gooseberry bushes, then a few blackberries, a liberal plot of raspberries and a strawberry bed. The latter fruit is the first of the season, as well as the most delicious. Who can say they do not relish a dish of fresh strawberries and cream? Now is a good time to lay plans for starting a fruit garden in the spring. Select the site, make out a list of what you want to set, forward it to some reliable nurseryman, and when the plants are received in the spring, plant them out very carefully, tend them well, and enjoy the eating of the fruits thereof.

Apple seeds do not reproduce the same varieties, but generally give a hardy, though inferior sort, and upon these seedlings are grafted or budded the finer varieties. The seeds may be planted in the Fall, or at any time through the Winter when the ground is sufficiently open, or they may be planted in early Spring, but in that case the seed must be mixed with damp sand and frozen, after which care must be taken that they do not become dry before planting. The soil should be deep, rich and well prepared, and the seed sown quite thickly in rows two feet apart. As soon as the plants are up, they should be well cultivated, and every effort made to secure a vigorous growth the first season. If this is done, the plants will be large enough to set in nursery rows the next Spring; but on poor ground, and under poor cultivation, they will require two years' growth. They should be set in nursery rows three feet apart, the plants twelve inches apart in the row, and may be budded that Summer or grafted the following Spring, after which they will require from one to three years' growth before setting in the orchard.

The fruit grower, when training his trees, should have an idea in his mind of just what he wants, both as to size and shape. If he has this, and will attend to the pruning at the proper time, there need be very little cutting of large branches to leave bad wounds to bring disease and decay upon the tree itself. A tree should be so shaped that it will be strong enough to hold up its load of fruit without breaking, compact enough to withstand severe winds, and open and thin enough to give a healthy growth to all the leaves and fruit. A great many trees are neglected till the tops are so thick, and the growth so fine, that large, healthy fruit is an impossibility. A certain amount of room, of air and sunlight is required for the healthy development of everything that grows. Large fruit can only be produced upon trees that have large, healthy leaves, and when there are three or four twigs or leaves where there should be but one, the fruit must be small.

The next on the list is "plums." Of these varieties we have a limited number. I will name them in the order as they rank: "De Soto," "Minei," "Lombard," and some say "Wild goose." The De Soto is the earliest variety, and the sweetest, and I think the most profitable to raise.

The Miner is too well known to say much about it. It is rather a shy bearer, and only once in a while are we certain of a crop. When we get a good crop we wish we had more of them, and when we fail we think we have lost each of them. The Lombard is about like the Miner for bearing; but one-third larger, with a dark skin, and very sweet. Now, I have only shown you the bright side. For the other, side, we have all the insects and

curculio to fight. They know what good fruit is, as well as some agents, and are not half as deceiving about it. I find it a good plan to take dry ashes and scatter over the trees about twice a week for four weeks from the time the blossoms begin to show. This you will find a good remedy and about as successful as any. These varieties I have mentioned will grow where apple trees will.—Geo. W. Garrett, Roscoe, Ill.

The Fish Pond.

Construction of Carp-Ponds.

In the following way, five of my carp-ponds are constructed, which are supplied only with surface water. Last summer the water in these was as pure and clear as that of a fine lake. This was owing to their being well stocked with carp. A dam is thrown across the lower end of a hollow; the dams are made entirely of soil or earth; this is the best material to make a dam of, and is also the cheapest. The sides of the dam should have a slope of at least 45 degrees. I do not use any stone or wood (except on overflow or drain) on this kind of a pond. I try to have no stones nor pieces of wood lying around near the ponds, for these are only places of shelter for some of the enemies to the fish, and an inducement for snakes, crawfish, etc., to harbor near the ponds. The deepest part of the pond should be at least eight feet; then it should run out shallow on the sides all around, or as much so as possible. It is better to have the shallow places in the pond on the north and west sides; here the sun will strike the water early in the day, and if shallow, will warm it up quicker. The carp will always be found in the part of the pond where it is warmest; here they find most of their nourishment, and it is in the warm, shallow places where most nourishment is produced, such as insects, etc. Toward the cool part of the day or evening, the carp retire to the deeper parts of the pond (where it is then the warmest), and so do the insects that were hatched or bred during the day.

There should be no gravel or stone in the deepest part of the pond. Spade up well the bottom of a new pond before the water is let in. Have as much surface water flow into the pond as possible; more nourishment is in this than in spring water, especially when it flows from pastures.

There should be a ditch around a carp-pond, so that the water that comes from the melting of snow can run off, as too much snow water let into a carp-pond will sicken and often destroy the fish.

During winter, one or more large bundles of rye straw should be placed upright in the water, in this kind of a pond. This will leave air-holes in the ice, and then it is not necessary to chop holes in the ice when the pond is frozen over.

Carp-ponds should be constructed in such a way that the water can be drained from them entirely. This is necessary when the fish are to be taken from them for market, etc., or when you wish to clean out the pond of too much accumulated mud, etc. This mud makes an excellent fertilizer for meadows, etc.—*Farm and Fireside*.

DECLINE OF MAN.—Nervous Weakness, Dyspepsia, Impotence, Sexual Debility, cured by "Well's Health Renewer." \$1.

A NOTED BUT UNTITLED WOMAN.

(From the Boston Globe.)

The above is a good likeness of Mrs. Lydia E. Pinkham, of Lynn, Mass., who above all other human beings may be truthfully called the "Dear Friend of Woman," as some of her correspondents love to call her. She is a devoted helper to her work, which is the only life-study, and she is able to keep six ladies assistants, to help her answer the large correspondence which daily pours in upon her, each bearing its special burden of suffering, or joy at release from it. Her *Vegetable Compound* is a medicine for good and not evil purposes. I have personally investigated it and am satisfied of the truth of this.

On account of its proven merits, it is recommended and prescribed by the best physicians in the country. One says: "It works like a charm and saves much pain. It will cure entirely the worst form of falling of the uterus, Leucorrhoea, irregular and painful Menstruation, all Ovarian Troubles, Inflammation and Ulceration, Floodings, all Displacements and the consequent spinal weakness, and is especially adapted to the Change of Life."

It permeates every portion of the system, and gives new life and vigor. It removes faintness, flatulency, destroys all craving for stimulants, and relieves weakness of the stomach. It cures Bloating, Headaches, Nervous Prostration, General Debility, Sleeplessness, Depression and Indigestion. That feeling of bearing down, causing pain, weight and backache, is always permanently cured by its use. It will at all times, and under all circumstances, act in harmony with the law that governs the female system.

It costs only \$1. per bottle or six for \$5, and is sold by druggists. Any advice required as to special cases, and the names of many who have been restored to perfect health by the use of the *Vegetable Compound*, can be obtained by addressing Mrs. F., with stamp for reply, at her home in Lynn, Mass.

For Kidney Complaint of either sex this compound is unsurpassed as abundant testimonials show.

"Mrs. Pinkham's Liver Pills," says one writer, "are the best in the world for the cure of Constipation, Biliousness and Torpidity of the Liver. Her Blood Purifier works wonders in its special line and bids fair to equal the Compound in its popularity."

Open from 6 o'clock a. m. to 8 o'clock p. m. Sundays, from 8 o'clock a. m. to 12 m.

Owing to the great thorough daily patronizing of our only known establishment, gentlemen ONLY can be accommodated.

RANDOLPH & SMITH, Proprietors.

NEW RICH BLOOD

PARSON'S PURGATIVE PILLS make new rich blood, and will completely change the blood in the entire system in three months.

Any person who will take one pill each night from one to twelve weeks, may be sure to find everywhere, or sent by mail for letters stamped.

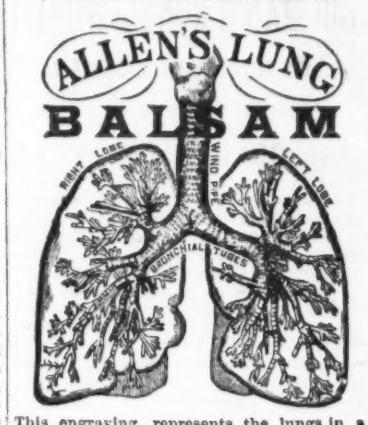
I. S. JOHNSON & CO., Boston, Mass., formerly Bangor, Maine.

TURKISH BATHS.

THE BEST IN THE WEST at the Southern Hotel Bath Rooms, South Fifth Street.

Open from 6 o'clock a. m. to 8 o'clock p. m. Sundays, from 8 o'clock a. m. to 12 m.

STRICTLY PURE.
HARMLESS TO THE MOST DELICATE.



This engraving represents the lungs in a healthy state.

THE GREAT REMEDY FOR CONSUMPTION, COUGHS, COLDS, CROUP, AND OTHER THROAT AND LUNG AFFECTIONS.

It contains no Opium in Any Form.

Recommended by Physicians, Ministers and Nurses. In fact by everybody who has given it a good trial. It never fails to bring relief.

Caution.—Call for Allen's Lung Balsam, and shun the use of all remedies without merit.

As an Expectorant it has no Equal.

For sale by all Medicine Dealers.

A GOOD ACCIDENT POLICY

—TO HAVE IS—

PERRY DAVIS' PAIN-KILLER.

It brings Speedy Relief in all cases of Sprains and Bruises.

THE BAD AND WORTHLESS

are never initiated or counterfeited. This is especially true of a family medicine, and it is positive proof that the remedy is of the highest value. As soon as it has been tested and proved by the whole world that Hop Bitters were the best, best and most valuable family medicine on earth, many imitations sprung up and began to steal the notices in which the press and people of the country had expressed the merits of H. B., and in every way trying to induce suffering invalids to use their stuff instead, expecting to make money on the credit and name of H. B. Many others started nostrums put up in similar style of H. B., with various devices, and the result was, that the name of H. B. was used in a way to induce people to believe they were the same as Hop Bitters. Much pretended remedies or cures, no matter what their style or name is, and especially those with the word "Hop" or "Hops" in their name or in any way connected with them or their name, are imitations or counterfeits. Beware of them. Touch none of them. Use nothing but genuine Hop Bitters, with the bunch or cluster of green Hops on the white label. Trust nothing else. Druggists and dealers are warned against dealing in imitations or counterfeits.

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THIRTY-SIXTH YEAR.

COLMAN'S RURAL WORLD.

BY NORMAN J. COLMAN.

PUBLISHED WEEKLY AT

ONE DOLLAR PER YEAR.

ADVERTISING: 25 cents per line of space; reduction on large or long time advertisements. Address NORMAN J. COLMAN, Publisher, 600 Olive Street, St. Louis, Mo. (Advertisers will find the RURAL WORLD one of the best advertising mediums of its class in the country. This is the uniform testimony of all who have given it a trial. Many of our largest advertising patrons have used it for more than a quarter of a century, which is the highest possible recommendation of its value as an advertising medium.)

Readers of the RURAL WORLD, writing to or calling upon, any one advertising in our columns, will do us a favor if they will say they saw the advertisement in this paper.

PREMIUMS FOR CLUBS.

In reply to inquiries whether we will offer premiums for large clubs we will say that we have concluded to open a premium list in which our friends can make such offers as they like in poultry, hogs, pigs, implements, machines, nursery stock, and such articles as we have been in the habit of offering in years past. Those wishing to aid in extending the circulation of the RURAL WORLD should send us letters stating what they will give. We will keep list standing, giving name and post-office of donor and the article offered. Our subscribers can now go to work getting up clubs with the assurance that every large club maker will get a fine premium.

Chalmers D. Colman, Lakeside stock farm, St. Louis, Mo., offers one pure Jersey Bull calf, from deep milking strains.

L. W. Ashby, Calhoun, Henry Co. Mo., offers a fine Berkshire pig.

Ephraim Link, Greenville, Tenn., offers one half bushel of Link's Hybrid cane seed.

Thos. D. Fox, Freeburg, St. Clair Co., Ill., offers as one premium one pair pure bred white Leghorn chickens and one setting of Brown Leghorn eggs.

And for another premium the same party offers one pair pure bred brown Leghorn chickens and one setting of white Leghorn eggs—all to be packed and shipped as directed.

Mr. H. V. Fugley, Plattsburg, Mo., offers a first class merino ram as a first premium.

Henry Schnell, Glasgow, Mo., offers 100 Cumberland Triumph, 1 doz. Manchester, 1 doz. Big Bob, and 1 doz. Jersey Queen Strawberry Plants, the receiver paying express charges.

Miss Alice Fisher, of Summerville, Peoria Co., Ill., offers for one of the premiums one setting of Pekin Duck eggs and one setting of Plymouth Rock eggs.

Isaac F. Graves, of McKenney, Texas, will give a pure bred Essex pig, of either sex, to the first club of either subscribers for the RURAL WORLD, from the counties of Grayson, Collin, or Dallas, in the State of Texas.

MEXICO, Mo., has a woolen factory, a stocking factory and a kindling factory, and needs a creamery badly.

Mrs. H. D. AYRES, wife of the well-known breeder of Shorthorn cattle of Saline County, Mo., died after a lingering illness at Marshall on the evening of the 14th of February. Mr. Ayers' Kenfucky and Missouri friends will sympathize with him in this great affliction.

HON. A. M. GARLAND, late of the United States Tariff commission, paid us a pleasant visit last week, and has since paid us the compliment of sending to this office a copy of the report of the Commission. Mr. Garland is a very conscientious and experienced man. We can well afford to differ with such men.

INFLUENTIAL English journals feel somewhat gloomy over the agricultural prospects the coming season. The acreage of grain and crops generally in Great Britain and on the continent are considered lighter than last year. Protracted heavy rains, especially in December and January, added to the stormy and wet weather, up to date have conspired to render the outlook highly discouraging.

THE Wisconsin Cane Growers' meeting at Madison last week, was a decided success. There was a large attendance, and over one hundred samples of syrup were exhibited and several samples of fine sugar. The business of making syrup and sugar will be largely increased in Wisconsin the coming season. J. A. Field & Co., of St. Louis, will publish a full report of the proceedings.

THE final reports of the cotton crop for last season are all in. The department of agriculture puts the number of bales at 6,800,000. Texas heads the list with the greatest number of bales, 1,326,000. Mississippi, Georgia, Alabama, Arkansas, South Carolina, Louisiana, North Carolina, Tennessee, Florida, Missouri, Virginia follow in the order named. This State is credited with 25,000 bales. The list of products that Missouri can't turn out is exceedingly small.

AN humble fish dealer named Johnson, in the Union market, this city, recently found himself the possessor of a somewhat worn silver half dollar which he could not dispose of. He went to the sub-treasury and here it was also refused and returned to its unfortunate owner. Mr. Johnson asked then if a great big government like this was going to impose on a poor man in this way refusing to redeem its own money that was not mutilated or otherwise injured by the holder. His remarks were unheeded. He immediately addressed a letter to the U. S. Treasurer, Washington, asking that official if the government was going to redeem that half dollar—adding that the sub-Treasury here refused it. His letter

was answered at once (Feb. 3d.) by the treasurer who said that the half dollar enclosed would be redeemed because there was no injury to complain of save that arising from natural wear while in circulation. He presented himself again at the sub-Treasury; armed with this important letter he got a polite hearing and an exchange of half dollars.

In reply to numerous inquiries for Northern cane seed we will state that we do not keep it for sale, and only know who do have it for sale by referring to our advertising columns, and they are open to the inspection of all. The demand is far in excess of any former year, and parties having any of the varieties to sell, should advertise them. The seed did not ripen well in the northern States, and planters there have to get their seed from a more southern latitude. It is very important to start out with good seed, and no mistake should be made by planting bad seed.

We should be doing injustice to our thousands of friends who have swelled our lists of subscribers so remarkably, if we did not return to one and all of them our profoundest acknowledgements for the kindness they have done us. To repay them in some slight degree for their services, we have taken especial pains to furnish them with one of the neatest papers published. We use book paper, new type, the best of ink, the best printing press, and then paste together and cut the leaves so that one page is just as good as any other page. If our subscribers will continue to help us we promise to continue to help them. The addition of every new subscriber is a help to us and we here desire to thank every one who has sent only one; but to those who have sent a large number our thanks are still more earnest. Keep up the good work throughout the year, securing every new name possible, and we will reciprocate by improving the matter and appearance of the farmers' own paper—the RURAL WORLD.

THAT the South is steadily progressing and enlarging its prosperity is becoming more manifest every day. It was only a few years ago that St. Louis used to be making a good deal of money shipping eggs to all the principal cities south of Missouri—especially to Memphis, Vicksburg, Mobile and New Orleans. Now, the tables are turned, for most of the Southern States are not only furnishing their local markets, but also find it profitable to ship north a good part of the winter season. Eggs are very high in St. Louis at present, 28 cents to 30 cents per dozen, and we find most of the receipts are from Kentucky, Tennessee and Alabama. They have met with such encouragement here in this way the past season, that we look for much more extensive operations in this line in the future. This will be the great distributing centre for the southern shippers, as it is the principal market for the purchasers north of this.

THE State of Georgia is beginning to realize her resources and opportunities as a producer of fruits and vegetables. New railroads and the increased facilities for reaching the many Northern markets have given a great boom to this industry in Southern Georgia, where half a dozen counties are interested. Last week there was a convention of the growers representing six counties who proposed making a specialty of this business, held at Quitman. The meeting was composed of some 200 growers and shippers, and a good deal of interesting information was elicited during the discussions and debates following. It appears among other things that 7,000 acres will furnish this season 7,000,000 melons. It was also shown that from 1,000 to 1,200 marketable melons can be made on an acre of good land; that an average car-load of marketable melons of marketable size is 1,000; that the average profit on last year's crop was \$150 per car load; that the first melons of the season shipped by Mr. Eddie Young, of Quitman, netted him \$500—one car load, that the prices of melons in Louisville, Nashville and Chicago early in the season ranged from 50 to 75 cents apiece, and never went below 20 cents during the season; that shape, as well as size is an important requisite for marketable melons; that green and striped melons are the most popular, those with white rings being rejected, it is supposed, on account of their resemblance to the old pie melon; that Mr. McRee cleared last year \$9,000 on one hundred acres of melons, and his yield per acre fell below that of any previous year since he has been engaged in the business; that the Louisville and Nashville Railroad offered better accommodation and more reasonable rates to the fruit and vegetable growers last season than any other road in the country; and that it will be liberally patronized this year; that the freight on a car-load of melons from Albany to Nashville last year was \$65; to Louisville, \$70; to Chicago, \$105; to Evansville and Indianapolis \$90.

ONION CULTURE: Prize Essays Thereon. A neat volume of 80 pages published by D. Landreth & Sons, Philadelphia, Pa. Price 25 cents. This publication embraces 9 valuable essays by practical cultivators, and contains so much valuable information that everybody engaged in the cultivation of the onion, even on a small scale, should have it. Utah, North Carolina, Connecticut, Iowa, Missouri, Massachusetts and Georgia are represented by the writers, and outside of the information furnished regarding the cultivation, an interesting review of the industry for the past 20 years is furnished. CEREAL CULTURE: Prize Essays Thereon. Published by the same firm at 25 cents. The foregoing remarks will apply with equal force here. The treatment of the subject is similar, disclosing a great fund of valuable information.

Messrs. Nowlin and Gregory, of Little Rock, Ark., have just issued a new monthly publication styled the *Rural Southwest*, at one dollar a year. These gentlemen are well qualified to make a readable and instructive paper, and the RURAL WORLD extends to them the hand of fellowship, and hopes their venture may be prosperous and profitable.

COMING TO MISSOURI.

Notwithstanding the fact that the wise and enterprising solons of our State Legislature have taken steps to abolish the only recently created State Board of Immigration, the people of less favored states and countries, having heard of the productiveness of our soil and the large and varied crops raised here, the cheapness of our lands and the excellent social condition of our people, have got their eyes turned hitherward and will come to us in large numbers during the coming summer.

For the information of those who are thus minded, we publish the following from the *St. Louis Republican*:

Will you please inform me through your paper whether there is any government land in Southwest Missouri or not? If so, what counties contain it? Is it timber or prairie? Is it hilly or level land, and good for farming purposes, and what can it be bought for?

There are government lands subject to sale at \$1.25 per acre, or to homestead entry, in Howell, Texas, Oregon, Camden, Pulaski, Benton, Shannon, Ripley, Wayne, Phelps, Stoddard, Madison, Bollinger, Butler, Dallas, Miller, Hickory, Laclede and other counties in Southwest Missouri; but we cannot give a detailed description of them. Inquiry may be made at the United States land offices in Boonville, Ironton and Springfield.

Notes-Correspondence.

—Can you or some of your readers tell me where I can get some red Antichokes and the cost per bushel?—W. P. R., Milan, Tenn.

Will some one of your many readers or correspondents tell us which is the best barbed wire for fencing purposes?—JAMES P. T., Moberly, Mo.

—I will send Mr. R. S. B. some Bermuda grass to try in his climate free of charge if he will write to me about the 15th of April.—J. T. GOODWIN, Carrollton, Mo.

—H. M. C., of Kenosha, Wisconsin, will find letters in the RURAL WORLD respecting the lands, etc. of Missouri, from week to week.—ED.

—Can you tell me where I can get a pair of Toulouse geese or a setting of their eggs, and the cost? I read of them in the RURAL WORLD and would like to get a start. What are the Embden geese?—R. I. C., Dennis, Iowa.

—Where can I get a pair of Pekin ducks, and for how much?—G. W., New Madrid, Mo.

See our advertising columns. We have many applicants for the same foil.

—Have you pure-bred Black Breasted Red Games? If so, how do you sell their eggs? I would like to buy them, but do not want to send too far, and want them at low figures.—W. H. M., Frolina, Mo.

—Will you please tell me, through the RURAL WORLD, the cause of nightmare?—A. H.

Nightmare is caused by remaining so long in one position that the blood stagnates, or ceases to circulate.

—I wish to buy a good single driving horse. Would like one from four to seven years old, of good style, size and speed, well broke and kind. If you have such a one for sale, please give description and price, and probably freight to his place.—R. J. HARRIS, Fort Scott, Kas.

—W. H. & A. Leonard, Mt. Leonard, Mo., write that their late extensive importation of Polled cattle reached home all right and in good shape. The day after their arrival at Waveland farm, eight head were sold to Mr. Page, of Los Angeles, Cal., as follows: One cow and calf, \$1,500; three heifers under one year old and one under two, for \$575 each; two yearling bulls (one Angus and one Galloway), for \$600 each.

—Having not been able to find anything on "milk sickness" in medical literature, I take the liberty of addressing myself to you, thinking that through your thorough acquaintance with subjects pertaining to agriculture, you might be able to inform me whether anything was written in books or agricultural papers on the disease. I would be under great obligations for any information on the subject.—L. M. GERLING, M. D., 1411 Salisbury Street.

—COL. COLMAN: I received the 240 pound scales to-day, and must say I am delighted with them. Every farmer needs such scales.

Which, in your opinion, is the best breed of swine, the Poland-China or Berkshire?—LOUIS A. SASSE, Howard Co., Mo.

You can't make a mistake by getting either. Both breeds have high merits. The Berkshire is more active and finer boned, but the Poland-China grow to greater size.

—Knowing you to be well informed on all matters pertaining to the farm, would like you to name to me the best work of general utility, and particularly on chicken farming and incubators.—SIDNEY I., St. Louis.

We know of no work equal in value, to one engaged in or contemplating farming in any particular department, to the RURAL WORLD. It is full to overflowing with live matter fresh from the field every week, which, if well digested, can hardly lead an intelligent man astray.

are fairly wild over the calf trade. They will ride half a day to buy a calf at double its worth.

I saw a recipe in the RURAL WORLD for preserving fence-posts, composed of linseed oil and coal, the latter pulverized, and then both mixed to the consistency of paint. Would like to know the kind of coal used and the number of applications necessary.—PLEBIAN.

—The season so far has been disagreeable, but not intensely cold, the thermometer reaching only 4 degrees below zero. There is a very large acreage of wheat in this county, and from what I can see and hear, the prospects for an average crop are good. By examination, I find that the fruit crop is not materially injured.

Will you inform me, through the RURAL WORLD, if A. B. Mayer & Co., of St. Louis, and their Fertilizers are reliable? They advertise in the RURAL WORLD.—J. A. W., Oronogo, Mo.

Thanks for your crop report. Yes, we consider the firm reliable and their fertilizer equally so.

—Please give me the name of some parties manufacturing incubators. I have looked through your valuable columns, but can find none advertised.—G. H. H., Florence, Kansas.

This is a sample of dozens of similar letters received at this office, but the incubator business does not show up. We are strongly inclined to the belief that there is none like unto the good old hen, and the sooner people give up the notion of making chickens by the wholesale, unless in that way, the better it will be for them. Chickens can be raised in any quantity by correct methods of chicken farming.

H. M. K. of Irving, Ills., writes: I would like to know what is the matter with my hired hands. I have hired many at different times, some of them appear to be lively, supple and energetic, have first class appetites and with apparent happiness for a few days when they get saucy, dull, and stupid and if interested in anything it is not what they are working at. They go to bed late and rise late; sometimes do not get their clothes on and themselves washed in time for breakfast. I believe they are fondled. Can any one tell me what is good for a fondled hired hand? I will try any easy and mild remedy.

REPLY.—They are perhaps just a little tired, give 'em a rest.

—What is usually considered a car load of sheep? and the same of cattle.—J. S. T., Plattsburg, Mo.

Whilst subject to slight variations the following figures are about correct. Nominally a car-load is 20,000 pounds. It is also 70 barrels of salt, 70 of lime, 90 of flour, 60 of whisky, 200 sacks of flour, 6 cords of soft wood, 18 or 20 head of cattle, 50 or 60 head of hogs, 90 to 100 head of sheep, 9,000 feet of solid boards, 17,000 feet of siding, 13,000 feet of flooring, 40,000 shingles, one-half less hard lumber, one-fourth less of green lumber, one-tenth less of joist, scantling, and other large timbers, 340 bushels of wheat, 400 of corn, 680 of oats, 400 of barley, 360 of flaxseed, 360 of apples, and 430 of Irish potatoes, 360 of sweet potatoes, 1,000 bushels of bran.

The Weather and the Roads.

EDITOR RURAL WORLD: We are in the midst of, perhaps, the worst spell of weather that we have enjoyed for many years. On last Saturday we had an unusually heavy rain with high winds that blew down considerable fencing; at night it turned cold and treated us to a heavy sleet. Monday morning the mercury stood at 7° above zero. Tuesday it was warm enough to rain again; result, more sleet, which has done much damage to trees, especially the peach, a great many of which are ruined. Forest trees are badly used up, but the worst damage was to the roads. There are ditches in the center of the roads that are four feet wide and eighteen inches deep. Our fields! well, they look ruined; done by the rain which came on a general thaw-out. I have been here 19 years, and feel certain that so much damage has never been done to roads and farms. If the farmers had put in a little time last fall on the roads the present damage would have been averted. If the roads had been properly drained they would have been safe. They are drained now, but the drain is in the wrong place. Instead of being on either side of the road, it is in the center. In the future we will do well to look after the roads in time, and not depend on supervisors. The best time to do road work is in the spring. Roads put in good order in the spring will stand.

UNCLE JOHN.
Cobden, Ill., February 8, 1883.

Wayne County, Missouri.
EDITOR RURAL WORLD: In response to your call for information about Wayne county, Missouri, for the benefit of your New Haven correspondent, I give you some of my views of Wayne County, after a residence of nearly seven years within its borders. First, as to its climate. It is in the same latitude as Richmond, Virginia. That sounds as if it were never cold here; but, as I write, I look out upon a snow of four or five inches, which has been with us two weeks, and which will add at least five bushels per acre to the coming wheat crop. We have moderate winters and summers, and the spring and fall seasons, unless uncommonly rainy, are as delightful as those of the table lands of Mexico. A heavy fall of snow is very unusual, and any extreme of weather usually lasts three days.

Stock can run the whole year round, only requiring feeding and shelter during storms. I have never seen finer, healthier lambs than those dropped a month since. There is a great future for this county in sheep and cattle grazing. I have visited Texas and seen her vaunted sheep ranches, but I would prefer Wayne county to any lands seen in Texas. I can show dry winter grasses to-day nearly waist high, which are green

and succulent near the roots and easily gotten at by stock. With the exception of the sand-bars on the rivers and gravel beds, I don't know of an acre in this county which will not do to graze upon.

The soil varies. The river bottoms of course, are rich, but they have not the tenacity of the clay uplands. Under the old Missouri style of farming, only the valleys were tilled. New-comers from hilly countries are proving that the hill-sides yield as abundantly as the lowlands.

The southeastern part of the county is level, and borders on Mingo swamp, which will, by opening and draining, throw thousands of acres of extremely fertile lands upon the market. With the lax culture given by our people we have a yield of from 12 to 20 bushels of wheat, 35 to 75 bushels of corn, 100 bushels of turnips, two tons of hay, beets weighing 8 to 10 pounds. I saw one sweet potato measuring 2 feet, 7 1/2 inches long and I weighed it myself—7 pounds, 10 1/2 ounces, and even then the tip end was broken off. I ate apples this fall, weighing nearly two pounds—"Ben Davis" variety. I raised potatoes ("Irish") weighing one and a half pounds, and other have done still better. There are uplands called "flat-tops" by the "natives," which, under a system of careful tillage and rotation, will, I believe, produce 40 bushels of wheat to the acre.

The people generally, are law abiding, quiet and sociable. They have been anything but progressive until within the past few years, when a spirit of enterprise seemed to enter amongst them; quietly at first, but growing.

When I first came to Piedmont, it had more razor-backed hogs than I ever saw in one little town of 200 inhabitants. Now, you cannot find one, and Piedmont has grown to be a pushing town of 1500. There is a good market here for vegetables and all sorts of garden produce. The numerous saw-mills take all that is raised, and would take twice as much if we had it.

There is a County Immigration Society, and the Secretary, Mr. Ben. A. Hamilton, of Piedmont, Mo., will take pleasure in corresponding with any one who desires information, or is seeking lands. The Society own no lands themselves, but are working purely for the good of the county. Should you desire it, I will drop you a few more lines again.

W. B. HARRIS.

Piedmont, Mo.

The Weather in January.

EDITOR RURAL WORLD:—The following is very nearly a correct weather report for the month of January, 1883, showing how cold it was each morning at daylight. Think it will be interesting to some of the many readers of your paper. January 1st, 28 degrees above zero—snow; 2nd, 2 deg. above; 3d, 3 deg.; 4th, 32 deg.; rain and sleet; 5th, 28 deg.; 6th, 32 deg.; 7th, 34 deg.; close, cloudy; 8th, 18 deg.; some snow; 9th, 5 deg.; 10th, 30 deg.; with warm west wind; this was a very peculiar day, several snow storms, heavy shake at night; 11th, 10 deg. above; 12th, 14 deg.; clear, wind south; 13th, 42 deg.; rainy, 32 deg. at 9 A.M.; 14th, above; 15th, 20 deg.; cloudy; 16th, 28 deg.; clear; 17th, 40 deg.; 18th, 26 deg.; wind south; 19th, 30 deg.; 20th, 10 deg.; 8 minutes at noon, heavy thunder; 21st, zero, wind south; 22nd, 2 above, a clear wind south; 23d, 14 deg.; clear, wind north; 24th, 24 deg.; wind south; 25th, 30 deg.; cloudy, wind north; 26th, 30 deg.; cloudy, wind south; 27th, 26 deg.; rained all day; 28th, 30 deg.; wind south; 29th, 32 deg.; clear and warm; 30th, 46 deg.; rain; 31st, 24 deg.; clear part of the time. You will notice, that the lowest was zero, the highest 46 degrees above zero. The cold has not been very severe, neither has it been warm. The weather has been very uneven and very unhealthy. Mercury has never reached 60 during the month. You will see that we have had but little snow but much mud.

Fruit prospects good; wheat looks very poor; from the present outlook, the wheat crop of 1883 in Egypt will be light. Tomato growers are heating up, bound for a crop of tomatoes in 1883.

UNCLE JOHN.
Cobden, Ill., Jan. 31st, 1883.
The following is a report of the weather at St. Louis for February, 1882. Readers will be interested in comparing it with that of this year. February, says the report, was for above the normal, both in regard to temperature and precipitation. Barometer: Mean, 30.11; highest, 30.56; on 24th; lowest, 29.38, on 28th. Temperature: Mean, 43.9 deg.; highest on our records for this month; normal, 38.6 deg.; maximum, 73.2 deg., on the 12; the highest February maximum on our records; minimum, 19.2 deg., on the 21st; minimum below 32 deg., in 7 days; maximum above 32 deg., all the month. Mean relative humidity, 73.9 per cent.; mean dew-point, 35.4 deg. Total precipitation, 8.94, the largest for February on our record, and of which 6.71 inches fell on two days (19th and 20th); normal, 2.87 inches. Prevailing wind, direction, south. Total movement of wind, 7,803 miles; average hourly velocity, 11.5 miles; average cloudiness, 56 per cent.; number days clear, 6; fair, 13; cloudy, 9; rain fell on 13 days, snow on 1 day; number of solar halos 4, lunar halos 1; thunder-storms and lightning on 2 days.

South Missouri.

I have just been reading the RURAL WORLD of the 25th January 1883, and must say that, as well as I love the RURAL, few of its numbers have given me more pleasure than the paper I have just read. I was well pleased with the article written on the cars in Minnesota, and am very happy indeed to know that my old friend, Colman, has landed safely in a more temperate climate. I tender to Mr. Gere my sympathy, and hope he will have better luck next time he visits the hospitable climate of Minnesota in the winter.

But the article that pleased me most, is from the pen of R. M. Bell, in relation to the agricultural production of Shannon county. For the last thirty years I have been defending South Missouri against the aspersions hurled against her people, soil and climate by those living in more favored localities; by men who had never added to the development of the resources of their own region, but who seemed to feel it their mission on earth

to misrepresent the counties of Ripley, Carter, Oregon, Shannon, Howell, Douglas and Ozark.

How glad I am that Mr. Bell has come to the front and truthfully portrayed the advantages of Shannon county as an agricultural region. The same is true of all the counties named above. In August and September 1879, the *Times-Journal*, a popular paper then published in St. Louis, made various assaults against the people of the counties named above, and advised St. Louis capitalists to run railroads through our counties, suggesting that the inhabitants would fly before the march of civilization, like buffalo before the hunter's guns, and that the country could then be settled by civilized people.

In September, I wrote a short article in reply, in which I predestined what has so rapidly followed; that is, that St. Louis would not aid in giving us railroads. Allow me to take an extract from that article published in the *Times-Journal*, about the 20th September, 1879:

"We love St. Louis, we are proud of her portly dimensions. We are willing she should outstrip all her neighbors in material wealth and population. But we do not look to St. Louis for a railroad. She may aid Texas, Arkansas or the Gulf States, but she cannot afford to aid the 50,000 of her own neighbors who are scattered over the 4,000,000 acres of land you refer to in your editorial. . . . Entertaining the same views you express with reference to the ignorance and stupidity of our rural population she will not be undecieved until we are put into railroad communication with Kansas City, Chicago, Cincinnati and the cities of the South."

Thanks to the enterprise of gentlemen entertaining views at war with the expressed sentiments of the *Times-Journal*, and others of St. Louis, we are now in communication, by rail, with the outside world, via Kansas City, and ere the sun gets north of the equator, will be in connection with the cities of the South, and yet not a denizen of South Missouri has fled as was predicted, but on the contrary our population has nearly doubled itself since 1879. The policy of St. Louis with reference to South Missouri, is very much like that pursued by the churches, who give millions for the conversion of the heathen to christianity, while thousands perish in our midst for want of the gospel.

But my dear sir, I have not written what I sat down to write. When I began, it was my intention to tell your readers some of the advantages of Oregon county, how healthy it was, how mild the winters, how rich and cheap the lands, that a railroad was now being built through it, what a fine stock and fruit county it was, and a hundred other things; but getting off on the wrong foot I shall have to defer any minute description at present, and being in very bad health, and quite old, I may never be able to resume.

J. R. WOODSIDE.
Thomasville, Mo., Jan. 30th, 1883.

Coming Meetings.

June 20th.—Annual meeting American Association of Nurserymen, Florists and Seedsmen, St. Louis. N. J. Colman, St. Louis, President.

The Cattle Yards.

Geo. Morgan the well known importer and breeder of Hereford cattle is in England, where he has purchased 140 head of his favorites with which he will shortly sail for the United States.

AUDREAN CO., Mo., reports the following farm stock: Number of horses, 8, 260, valued at \$275,670; mules, 2,709, at \$118,400; asses, 65, at \$3,460; neat cattle, 27,146, at \$337,659; sheep, 20,714, at \$23,700; hogs, 19,853, at \$35,770; and 2,030 dogs, value, nil.

THE Missouri State Shorthorn Breeders' Association will meet in Sedalia, during the week of the annual meeting of the State Wool Growers' Association, viz: the first week in April. The Shorthorn breeders of the State alive to their own interests, will bear this in mind and attend the meeting in numbers proportioned to the interest they represent.

Many think the cattle business will be overdone, so many are investing in it. No fear of that. Population is increasing wonderfully, and consequently so is the demand for meat. Great foreign markets have been opened to us, and will ever remain open for our meats in some form or other. The people of the world will have meat in some form, and the cattle raisers of the United States will supply it, to satisfy the demand. Beef will be higher instead of lower. The demand is on the increase, instead of decrease.

THE attention of our readers is directed to the sale advertisement of Angus, Galloway and Hereford cattle to come off at Riverview Park, Kansas City, on the 25th, 26th and 27th of April next, by the Messrs. W. H. & A. Leonard of Mount Leonard, Missouri, and the Hon. M. H. Cochran of Quebec, Canada. These animals will claim the attention of the entire western country and attract a crowd equal to any that ever put in an appearance at Riverview Park. The cattle were purchased in Scotland and England by the gentlemen, parties to the sale, and they had the pick of the best to be found in the United Kingdom. They not only had this, but the intelligent experience to select and the means to invest in them. No more honorable men can be found than the Leonard Bros., and the Hon. M. H. Cochran has made a name and fame for both high breeding and honorable character second to no man in the country.

THE Columbia, Mo., *Herald* reports the following:
M. T. Hopkins, a wealthy cattle man of Pueblo, Colorado, visited this county last week and bought and shipped 20 young Short-horn bulls from the following parties at the prices stated: From

Lancelot Col. Thad from Jam W. H. C. Joseph Es head, \$2.25. W. Smith blood Here Company in the we He also Hereford Vest," as a Langston He also so ford bull.

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By Prof.

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Lancelot Palmer, four for \$450; from Col. Thaddeus Hickman, five for \$520; from James H. Parker, six for \$825; from W. H. Curtwright, four for \$400; from Joseph Estes, one for \$125. Total for 20 head, \$2,320; average, \$116 per head. F. W. Smith sold last week 45 head of half blood Herefords to the Prairie Cattle Company, one of the largest corporations in the west, for \$80 per head, or \$3,600. He also recently sold a thoroughbred Hereford bull 10 months old, "George Vest," a splendid animal, to George F. Langston and Wm. H. Jacobs for \$650. He also sold to Michael Bright a Hereford bull nine months old for \$300.

The stock breeder should always bear in mind that there is such a thing as improvement. The wool of the sheep can be improved in quality and quantity. Cattle may be improved in milking qualities or in beef qualities, by proper selection of types, and care in management. Horses may be improved in style, form, and speed. Even the pork quality of the hog can be improved. There should be no stand-still with the breeder or stock raiser. He is either going forward or backward. Which does he prefer?

The Shorthorns, for a long time to come, will be the leading breed for crossing on cattle for beef purposes. No other breed matures earlier, or puts the food assimilated into places that command higher prices. So, if the Shorthorn, at two or three years of age, can balance the scale at 1500 or 2000 pounds when it takes other breeds four or five years to pull down the scales to the same point, it is just so much in favor of the Shorthorn, for who wants to run the risk of life and health, and who wants to supply feed, even for the support of life, a year or two unnecessarily. The Shorthorn possesses so many merits that they will hold their own, though other breeds may get on the popular wave occasionally, by manipulation of some kind or other, yet the Shorthorn breed for beef will continue to be the most used and most popular breed.

A cow that has once aborted should be removed from the herd, fattened and sold, as she is liable not only to do so again, but other cows are liable to follow her example. It is always best to use disinfectants of chloride of lime, or solution of copperas in the stall. Ascertain the cause, and if it is found to be caused by ergot, or any deleterious plants in the pasture, remove the stock to other fields at once. Bad or musty hay will also cause abortion, and the bull should never be allowed to run loose among cows that are with calf.

THE PROFIT IN FEEDING STEERS.

By Prof. J. N. Muncy of the Iowa Agricultural College.

EDITOR RURAL WORLD:

The following table will show the weight and gain of ten steers selected as an average from a herd of 40:

Number of Steers	Weight at 1st Feeding	Weight at 2nd Feeding	Weight at 3rd Feeding	Weight at 4th Feeding	Weight at 5th Feeding	Weight at 6th Feeding	Weight at 7th Feeding	Weight at 8th Feeding	Weight at 9th Feeding	Weight at 10th Feeding
1	1612	1650	1688	1726	1764	1802	1840	1878	1916	1954
2	1450	1488	1526	1564	1602	1640	1678	1716	1754	1792
3	1288	1326	1364	1402	1440	1478	1516	1554	1592	1630
4	1126	1164	1202	1240	1278	1316	1354	1392	1430	1468
5	964	1002	1040	1078	1116	1154	1192	1230	1268	1306
6	802	840	878	916	954	992	1030	1068	1106	1144
7	640	678	716	754	792	830	868	906	944	982
8	478	516	554	592	630	668	706	744	782	820
9	316	354	392	430	468	506	544	582	620	658
10	154	192	230	268	306	344	382	420	458	496
Total...	11,892	12,848	13,804	14,760	15,716	16,672	17,628	18,584	19,540	20,496

The above steers were allowed to run with the remainder of the herd and given the same care and attention. The allowance at this time was 15 shocks of corn and all the timothy hay they would eat. The yards were so arranged that the hogs and cattle could be separated every night and morning. It is valuable also in this connection to know the gain on the hogs that were allowed to follow the herd of four steers. Dec. 11th, 1878, 93 hogs weighed 15,795 lbs. Feb. 28th, 1879, after a period of 79 days, they weighed 19,321 lbs. This is an average gain of 47 pounds per day for each hog.

This system of handling cattle and hogs is the most practical and economical for the Western farmers. I do not mention it as new, nor give the figures to show large gains, but more for the purpose of representing the average results obtained by ordinary care and feeding. I have learned from other farmers that with two hogs to the steer, the average gain for each during the winter was nearly one half pound.

Allowing 11-14 bushels corn, and 800 pounds hay per day, we can make approximations on profit, provided the same class of cattle and hogs were fed at the present time.

Gain on 40 steers for 83 days 4224 lbs.	\$211.20
Gain on 36 hogs for 53 days 2385 lbs.	141.30
Profit for 53 days.....	\$7.50

600 bushels corn @ 40c.....	\$240.
21 tons timothy hay @ \$5.00.....	\$105.
Profit for 53 days.....	\$345

An exchange has the following: Of the four leading classes of animals which farmers raise for profit—horses, cattle, sheep and hogs, cattle and sheep are ruminants or cud-chewing animals and hogs are non-ruminants. The ruminants have no front teeth in the upper jaw. They are essentially grass eaters, and all coarse food they eat is chewed twice. This fact of itself should teach us that the best guide as to quantity of rough food for them is all they will eat. Grass alone will produce milk enough to raise the young, and that is the natural use of milk. Butter is a manufactured product. The first churning was discovered by accident. Butter is oily; hence, to make good butter-yielding milk, we must use food that has more oil in it than grass has. The quantity of this kind of feed must depend on circumstances, as breed, shelter, care, etc. As to rough feed, hay, dried grass, is much better than straw, dry grain stalks, because much of the best parts of the latter have been used in maturing the grain. Rye, cut green and dried, is excellent hay. Oats, we suppose, and wheat would be nearly or quite as good. Hay alone will keep cattle and sheep in fair condition, but straw will not. If straw is fed instead of hay, something that was once in the straw—that is, grain, must be fed also, or the stock will go down. The farmer who expects his cattle to hold their own on straw only will soon discover his mistake. It is economy to so mix straw, hay and grain so that the stock will not only not fall off in flesh, but will grow right along all the winter.

Of muscle and bone-producing grains, there is none equal to oats and rye. Colts and growing horses not worked ought to be fed all the good, clean hay or corn or cane fodder they will eat, with a little oats and rye and in cold weather some corn. For any animal, wheat bran is always good in moderate quantities, but its chief value is in promoting digestion and preserving a good condition of the digestive and alimentary organs.

Big Cattle Companies.

The extent to which our merchants and business men generally are going into the cattle and sheep business is something amazing. It was only a very few years ago that such an enterprise was deemed so chimerical, that one of the biggest-headed and most far-sighted of Kentucky breeders found it necessary to go to England to secure the necessary funds with which to embark in the business. Now they are counted by the score, the capital of many reaching away into the hundreds of thousands, and some of them having over a million dollars of invested capital.

The occasion of this tremendous rush of men ordinarily credited with prudence and discretion, into a business they know nothing of, can be attributed only to a well grounded knowledge of the fact that their money is being well invested, and, in the ordinary run of things, pretty sure to bring them an ample return. But is it possible that the farming community, to which this matter has been submitted for years, are to lose all, or nearly all, there is in the business and allow their more enterprising merchants to gather the harvest and reap the shekels whilst they are sleeping or idly thinking whether it will pay? We cannot think so.

How then is it to be avoided? For surely available capital and the pluck to use it will carry the day unless some unseen power and unsuspected means are employed to checkmate them. These men are to raise the stock and will feed it on their own or somebody else's pastures so long as they can, but the bulk of it must be finished off with grain; say corn and oats and the rough fodder that accompanies them. Are our farmers then to be hewers of wood and drawers of water for the rich ranch men so far as to supply them with corn at a price oftener than not less than it costs to raise, if the time and labor of the farmer and interest on the value of his farm are considered? If not, what can they do to avoid such a condition of servitude?

The daily press can hardly keep track of the number of these big corporations, so numerous are they. It was on Tuesday only of last week that the St. Louis papers had the following, which adds two more to a long list of similar corporations:

"The Secretary of State for Illinois issued certificates of incorporation, among others, to Robert D. Hunter, Albert Y. Evans, Henry L. Newman and Watson B. Farr to incorporate the Comanche Land and Cattle Company of St. Clair county; capital stock, \$1,325,000."

"Also R. D. Hunter, A. G. Evans and David Hunter to incorporate the Running Water Land and Cattle company of St. Clair county; capital stock, \$800,000."

It will not be supposed that because these were incorporated in the State of Illinois, they are to operate there, by no means; their field of operations will be on the boundless prairies of the west, southwest or northwest, where pasture is both abundant and free, and the stock can be cared for at the minimum of expense.

In the course of a few years these companies will bring their cattle to market by thousands. They will be graded steers weighing from twelve to sixteen hundred pounds and rising three years. Nor is there any prospect of excess of supply, for though we may, and can, multiply companies ad infinitum we cannot make one cow produce more than one calf a year, unless in very exceptional cases, and the demand will keep pace with the supply. We are therefore increasing the capital and the means of handling the stock, and not the capacity for production.

Our farmers are therefore interested in this matter and in this way. They can raise the thoroughbred cattle on their small farms and with the usual care devoted to small herds, can raise the cows to produce the bulls that must be used to produce the grades which these corporations will bring to market. We are on the eve of a very busy season for the thoroughbred stock business and those who would make a good use of their farms, their means and their intelligent labor will attend them and secure the nucleus of a herd which will presently pay them from grass and corn much better than the mode hitherto adopted, of limiting the farm productions to corn and wheat. The farmer can conveniently and judiciously raise thoroughbred stock for which the demand is bound to increase every year, for these intelligent business men, on their large ranches, know already that they cannot afford to breed to scrubs, and as their numbers increase so will the call for Shorthorn, Hereford, Polled and Devon bulls. Will the readers of the RURAL WORLD profit by this suggestion?

Quantity and Quality of Food.

An exchange has the following: Of the four leading classes of animals which farmers raise for profit—horses, cattle, sheep and hogs, cattle and sheep are ruminants or cud-chewing animals and hogs are non-ruminants. The ruminants have no front teeth in the upper jaw. They are essentially grass eaters, and all coarse food they eat is chewed twice. This fact of itself should teach us that the best guide as to quantity of rough food for them is all they will eat. Grass alone will produce milk enough to raise the young, and that is the natural use of milk. Butter is a manufactured product. The first churning was discovered by accident. Butter is oily; hence, to make good butter-yielding milk, we must use food that has more oil in it than grass has. The quantity of this kind of feed must depend on circumstances, as breed, shelter, care, etc. As to rough feed, hay, dried grass, is much better than straw, dry grain stalks, because much of the best parts of the latter have been used in maturing the grain. Rye, cut green and dried, is excellent hay. Oats, we suppose, and wheat would be nearly or quite as good. Hay alone will keep cattle and sheep in fair condition, but straw will not. If straw is fed instead of hay, something that was once in the straw—that is, grain, must be fed also, or the stock will go down. The farmer who expects his cattle to hold their own on straw only will soon discover his mistake. It is economy to so mix straw, hay and grain so that the stock will not only not fall off in flesh, but will grow right along all the winter.

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Birth of a Duke at Hilldale.

Messrs. Rigdon Huston & Son, Blandinsville, Ill., write to the *Breeder's Gazette*, "Duchess of Overlake by 7th Duke of Hillhurst 34221, out of 7th Duchess of Hillhurst by 2d Duke of Hillhurst 12833, etc., produced a red bull calf, with white marks, on the 24th ult. This makes the 7th Duchess of Hillhurst a grandmother, with four living descendants, and she now bearing her fourth calf, while yet four months less than five years old. The 10th Duchess of Airdie is now a great-grandmother, with twenty-six living descendants (in female line) in America, and if we are not mistaken, there are almost as many in England as in America. Can any other cow on the continent now living and breeding show a better record?"

The Horseman.

Mr. W. H. Wilson of Cynthiana, Ky., has lately added the stallion Hambrin (2:21 1-4), to his stud. He is by Edward Everett; dam by Mambrino Chief.

Frank Van Ness' stable of trotters for next season comprises Hattie Woodward, 2:15 1-2, Alex. 2:19, Alecyone 2:20, 10th Duke of Airdie 2:24, Bob Davis, Toledo, St. James, Jay Bird, Black Wilkes and Archy. Of the number, eight are sons of George Wilkes.

Mr. C. M. Reed of Erie, Pa., has purchased of Major McDowell, Lexington, Ky., the three-year-old mare, Faree, by Princess, dam by Dorsey's Gold dust. Price, \$6000. This mare has a record of 2:33 1-2, and has trotted a trial mile over a three-quarter mile track in 2:23 1-2.

Rochester, N. Y., has a new disease among the horses. The disease is indicated by the refusal of the animal to take food, severe cough, more or less fever, stiffness of joints, and inflamed condition of the limbs following. Close blanketing, and plenty of fresh, cold air is found to be a cure more or less successful.

W. W. Bair has driven the fastest mile to harness, Maud S. in 2:10 1-4; Dan Mace the fastest mile to wagon, Hopeful, 2:16 1-2; Johnny Murphy the fastest mile with running mate, Yellow Dock, 2:11; Budd Doble the fastest two miles, Monroë Chief, 4:46; Charley Green the fastest mile to saddle, Great Eastern, 2:15 3-4; and "Knapsack" McCarthy the fastest pacing mile, Little Brown Jug, 2:11 3-4.

Dr. J. A. Sherman of New York city has lately added to his trotting stock a fine brood mare by Harold, dam by American Clay, together with a promising two-year-old colt and yearling filly, both from her, their sire being Geo. Wilkes. Few breeders in this country can show a better bred lot of trotters than can be seen at Dr. Sherman's Battle Ground Stock Farm, Freehold, N. J.

"Give the colt good air, clean quarters, plenty of room and opportunity for exercise, and he requires very much food—far more, it would seem than many people dream of, and he should be well supplied. The more pure air and healthful exercise the more food required, and the more food administered—in season—the greater the growth and strength, and as a result all valuable powers will be supplied. This is the course of true economy."

The fastest trotter of her size that ever lived, died of inflammation of the lungs at Mr. Bonner's farm at Tarrytown on Friday evening of last week. It was Mamie B., by Edward Everett, out of St. Lawrence Maid, the favorite road mare of Commodore Vanderbilt. She stood 14 1-2 hands and was 14 years old in September. Mr. A. Bonner weighing 180 pounds, has repeatedly driven her quarters in 32 seconds, and she has trotted a mile in 2:19 1-4.

A sandy, gravelly, limestone or rocky country, is best to grow up the sure-footed and leg-enduring horse. Start with sound horses in the breeding stud on such soil, give the right sort of food to the colts to make ivory bones, tough muscles and sinews, keep them duly exercised while growing, and you may be sure then to raise first-rate, serviceable, long-enduring stock; and when this is accomplished, be able to sell them at extra high prices, thus being well paid for all extra care bestowed in raising them.

Major Brown, of Spring Hill, Tenn., has purchased from F. J. Ewing, Columbus, Tenn., bay mare Alberto, by Alcalde; 1st dam Empress by Viscount, son of Alexander's Abdallah; 2d dam Hortense, by Mambrino Chief; 3d dam by Todd-hunter's Sir Wallace. Also 2-year filly Almaviva, by Enterprise out of Alberta; Enterprise is by Entell 2:29 out of Betsy Trotwood, by Peck's Idol. Also from Mr. Priest of College Grove, Tenn., a large and extra good bay road mare, 4 years old, by Black Prince Jr., he by Black Prince (son of Ticonderoga) out of a mare by Mambrino Chief.

E. A. Smith, of Lawrence, was offered \$3,000 last week for his Almont Pilot, a standard bred trotting stallion; but says "I don't want to sell him, because 'Kansas wants the best blood that can be procured,' and he adds: "I propose to furnish my share of it." He also refused \$10,000 for his mare Sister Wilkes, by Geo. Wilkes. Mr. Smith has forty head of trotting horses, including five stallions, brood mares, colts and trotters. Our old Kansas breeders will remember Mr. Smith as he brought the first herd of Jerseys to Kansas, some sixteen years ago. The celebrated bull Le Broque stands at the head of his herd now.

It is of the laws of trade to base the value upon the improvement of the breed—to first ascertain the value of the improvement, and then add so much extra to the cost of production. To sum up the best of breeding the rule is breed from the best. There is always a demand, at high prices, for the best that the market affords. They will command the market, and fix the price. Why does one horse sell for \$100 and another for \$1,000, in the same market? Because one is better than the other. The high-bred has inherited more style and stamina

than the low-bred. The well-bred horse have an acquired value from a family heritage that swells their price above the cost of production. If we breed from the best specimens of the best families, their improved value will rise far above their natural value, or cost of production. Let us breed from the best specimens of their class, that we may increase their numbers.

Mares will abort without any known cause. Of course fast driving, or short turning in slow work, or starting heavy loads, jumping, being kicked by man or beast, etc., will cause abortion. It is said that seeing food when desirous to obtain it, and failing, will so affect the nervous system as to cause abortion. Do not confine the exercise outdoors, but let her have all the exercise outdoors, but confine her to pasture or yard. If you confine her she will most likely take lymphatitis and endanger her own life and that of her colt.

The *Breeder's Gazette* observes that "during the season of 1882 we lost 24 new papers entered the 2:30 list, the most notable being Buffalo Girl, 2:12 1-2, Fuller, 2:17 1-4, Flora Belle, 2:15 1-4, Sailor boy, 2:17 1-4, Joe Bowers, 2:18, Lumber Jack, 2:18. The old-time favorites among the side-wheelers, are dropping out, and of the famous 'Big Four'—Sleepy Tom, Mattie Hunter, Rowdy Boy and Lucy—only the last named will hereafter be seen in the battles of the Central Circuit, as Sleepy Tom and Rowdy Boy have lost their speed, and Mattie Hunter will be bred in the Spring to one of the trotting stallions belonging to the owner, C. F. Emery, of Cleveland, Ohio."

O. A. Hickok will leave San Francisco on the latter part of March for the East with his stable of trotters, the prominent lights of which are St. Julien, Overman and Eva. He will go direct to Lexington and remain there until Spring becomes advanced. Past experience has convinced him of the folly of stopping at Chicago or Detroit and waiting for the campaign to open. The climate at Lexington in April is similar to that of California, so the horses should suffer but little from the change. Hickok will have with him several young trotters from the latter part of the breeding, the establishment of Mr. Rose, James Goldsmith, and charge of Director, Romeo and Sweetness, will also journey East in the latter part of March, and he will carry with him timothy hay from Oregon.

A series of experiments were recently conducted in Europe by Mr. Sanson to determine whether it was better to feed horses with oats whole or crushed. A gradual feeder apparatus was used to measure the muscular and nervous excitability caused by the feed, and the results led to the belief that oats eaten whole produce more exciting power per hour than crushed oats. The exciting principle in oats is a brown nitrogenous substance uncrystallizable, apparently belonging to the family of alkaloids, and which Mr. Sanson calls avenine. On many of our breeding farms it is the custom to bruise or crush oats fed to old mares and young colts. The stimulating effect of the food is more immediate than if the oats were fed whole, but it is not so strong or durable. For race-horses and work-horses uncrushed oats are the better food.—*Turf, Field and Farm*.

The remark is often made by men of some experience in turf matters that they prefer a trotter which will bear the whip some to a high-spirited, nervous one. This is all very proper, and as the country is full of the former class, they can be accommodated with all they desire. It is an established fact, however, that the brightest lights upon the trotting turf have been animals of naturally a highly nervous temperament, which did not need the stimulus of the lash to urge them on to victory. Maud S. (2:10 1-4), St. Julien (2:11 1-4), Rarus (2:13 1-4), Goldsmith Maid (2:14), Frink (2:14), Langstone (2:14), Hopeful (2:14 3-4), Lulu (2:15), Lucille Goldsmith (2:16 1-4), Edwin Thorne (2:16 1-2) and many other first-class animals, were naturally so nervous and sensitive that an injudicious use of the whip would undoubtedly have spoiled them, as it has many a promising young trotter.

It is not always the longest legged trotters that make the most successful campaigners or win the fastest heats. Flora Temple, the first trotter to beat 2:20, stood only 14 3-4 hands high, yet when in her prime no trotter upon the turf was big enough to beat her in a race when in condition. Hopeful, whose record to harness is 2:14 3-4 and to wagon 2:16 1-2, a figure never yet equalled, any other trotter to wagon in a public race, stands but fifteen hands high, when shod. The stallion Hannis, whose record of 2:17 3-4, made some time ago, had at that time been beaten by a few trotters of his class, is only a trifle over fifteen hands high. Jay-Eye-See, the fastest four-year-old that ever won a public race, is also a small horse, whose height does not vary much from fifteen hands. The brown stallion Lumps is believed by some to be the fastest trotter on the turf. He stands but little more than fourteen hands high, and has a public record of 2:21, which he can reduce several seconds when occasion requires. Lumps was foaled in 1875, got by Geo. Wilkes (2:22), dam by Pearsall, he by Jupiter, by Long Island Black Hawk. Should nothing befall him another season, he is liable to command the respect of quite a number of large ones in his class.

EATING TOO MUCH GRAIN.—What is the proper treatment of a horse which has eaten all he would of oats, meal, provender, or of any other grain, being unaccustomed to either? Would the treatment be the same whether the horse were warm from driving or not? F. M. G. (He should have a dose of physic at once; water allowed in very small quantities; all food kept from him for a period varying from 6 to 18 hours, depending upon the amount he had gorged. Walking exercise should be given. When food is given it must be bran well wetted, and this continued, excluding hay and grain, until the bowels respond to physic. If pain is evinced, mustard, 3-4 lb.; hot water (not scalding) sufficient to make a fluid that will pour easily and not be thin or watery; this is all to be rubbed on the abdomen, covering a space from the sheath half-way to the forelegs, and rubbed in well on both sides of the abdomen. Also give anodynes. Never take a horse to work that has in any way been overfed. Give physic and exercise, and small quantities of water often, with bran diet, until the bowels are relieved; then get back to dry feed and begin

work. Never trot a horse, or, what is worse, run him, when his stomach is overloaded. Overfeeding is often a fatal accident.—*Country Gentleman*.

Horse Breeding in France.

France is devoting a good deal of attention to improving the breed of horses; the government has at last consented to an annex for each regional agricultural show, specially devoted to the exhibition of horses, and where prizes will be awarded. In the way of official breeding studs and training schools, the legislature now votes 1-2 million of francs annually, or more than double the grant hitherto allowed. In these studs there were on the 1st of January last, 2,529 stallions; 218 being pure English and 187 pure Arab blood; the rest were crosses; there are types of carriage horses as well as of draught horses. The 2,529 stallions covered during the season, 130,000 mares; about 60 per cent of the coverings are successful. As compared with 1874, the total number of horses in France now is double—viz., 2, 1-2 millions.

Murray on Mustangs.

The Rev. W. H. Murray writes enthusiastically to the Boston *Herald* that Texas is just the place for horse breeding, and that the tough little mustangs are the right stock to take hold of for improvement. He declares that they trace their origin back to a "race of equine kings and queens," and have only deteriorated under hard usage. "I have seen these little 800 pound horses," he says, "travel eighty miles, with a 180 pound man up, under a Southern sun, in a ride across the country, without roadways, from sun to sun, and that, too, on little grain, perhaps nothing but the grass they get from the prairie at night. Many of them pace like the wind—pace so fast that they play with you on the prairie, though you have a blooded mount that can run like a greyhound. Others trot—trot naturally—with stifles out and perfect knee action, and will do nothing but trot however hard pressed. I have raced through the prairie grasses and flowers at the rump of a mustang stallion 15-2 hands high, and blood-bay in color, with a tail as black as night, and that would sweep the ground a foot, and been unable to break him from his trot or range up to his side, although my mount was a three-quarter bred mare of 1,000 pounds weight, that took to the chase with her eyes blazing and ears laid back in a way that plainly told her rider that she felt a good deal as he did." Mr. Murray advises a cross from a thoroughbred stallion, believing that it would increase the size without losing toughness, and produce the best saddle horses as well as trotters.

The Horse at the Illinois University.

Col. B. F. Johnson in writing to the *Prairie Farmer*, about the address at the Agricultural Institute of the Illinois Industrial University, said: Among gentlemen outside of the faculty of the University, who have spoken, Col. Mills, of the State Board, gave a very interesting and instructive talk on the Clydesdale horse, and COL. COLMAN, of St. Louis, treated the general subject of horse-breeding in an eloquent and attractive manner. It is, of course, quite a difficult matter to bring forward any new and at the same time interesting and important facts in regard to horses or breeding, but COL. COLMAN stated several facts which are worthy of repetition and further enforcement. Referring to the Shetland pony, he spoke of the business of breeding them as one of the most profitable of all in the horse line. They were as easily if not as rapidly bred as sheep—and as certainly and a good deal more safely; while the demand for them was so large they sold quickly at two and three years old from \$100 to \$200 each. There were only three or four breeders in the country; one in Texas, another in Missouri and a third in Kentucky. He spoke decidedly against the large draft horses for farm work, but said the demand was now, and likely to be for a long time, an unlimited one for them for heavy wagons and express work in cities and in the lumber regions of the North and Northwest, where they had taken the place of oxen. He also referred to the great demand for what he termed the "park or show horse," and the enormous prices paid for them when of good size and well matched, and he intimated, if he did not say, a cross of the Clydes and Normans with the thoroughbred of our best farm mares, might be made a very profitable business.

The Effect of Mule Breeding on Mares—A Breeder's Experience.

In your January number I noticed an article headed "Mule Breeding." With your permission I will give the readers of your Journal our experience in raising horses and mules. Twenty-five years ago I purchased a three-year-old filly. She was of good stock but very high strung. She inherited wonderful staying qualities; in fact, there was no let up to her, and she was a wonderful feeder. At four years old I bred her to a jack, and produced a mule colt the exact color of the jack. I then bred her to a thoroughbred Kentucky horse, and when the colt came it was the color of the sire. I then bred her to a jack. Since then I have bred her to horses. The colts have all inherited the exact color of the sire, with the disposition of the mare. I have several of her colts that have been breeding for several years, and for twenty years there has not been a colt dropped on the farm but what was the exact color of the sire. I invariably stint them at three years old to a jack, and then breed to horses after that. My reason for first breeding to a jack is that the colts are generally smaller, and not so liable to injure the mare; the colts come stronger and get up and suck without any assistance. I have not seen any symptoms of breeding back after the jacks, and I have had over forty of the old mare's colts and grand-olts. We have twenty on the farm, all have sprung from the old mare. They are all either bays or blacks. Cross-bred or mongrel mares may have a tendency to breed back or throw "sports." My experience is that all well-bred animals produce their own likeness, and the better the breeding of both parents the more certain of a good offspring. We find in breeding cattle that the get of some bulls come all shapes and colors, no two of them alike, while the same cows, bred to a bull of pure breeding, will bring calves that are uniform in color, and form or shape. The same principle holds good with sheep. Any man that is a good judge can pass through a herd of cattle, or any other stock, and tell whether they are well-

bred by the uniformity of their shape and color, for they all have the same general characteristics.—*U. S. Veterinary Journal*.

BREEDERS' DIRECTORY.

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D. W. MCQUITY, breeder of Short-horn cattle and importer and breeder of registered American Merino sheep, Rochester, Mo. Stock for sale.

CHAS. E. LEONARD, Bell Air, Cooper county, Mo., breeder of Short-horn cattle, Jacks and Merino sheep. Inspection of herd and correspondence solicited.

P. S. ALEXANDER, Lone Jack, Mo., importer and breeder of Cotswold sheep. Satisfaction guaranteed. Call or write.

H. B. SCOTT, Sedalia, Mo., breeder of pure bred Short-horn cattle, Cotswold sheep and Poland-China swine. Eight young bulls for sale.

R. T. McCULLY & BRO., Lees Summit, Mo., breeders and importers of thoroughbred Merino sheep of the Shetland breed. Prices reasonable and satisfaction guaranteed.

FOR SALE—Three Jersey bull calves. For pedigree, age and prices, address O. L. WALKER & SONS, Craig Crook Farm, Oregon, Mo.

J. BELL & SONS, Summerville, Texas county, Mo., breeders of pure Spanish Merino sheep. Choice ewes and rams at wholesale and retail.

G. B. BOWWELL, Breckenridge, Caldwell county, Mo., breeder of Merino sheep. To select from. Call or write. Prices reasonable.

QUESTER WHITE HOGS, H. W. Tonkins, Centon, St. Louis county, Mo., breeder of improved Chester white pigs. Stock for sale at reasonable prices. Ship from

The Home Circle.

TO BON AMI.

Good Friend, why would you ardent under-take
A task, that might the bravest fearful make?
Blame not the preachers, nor their shrewdest
friends:
Dependence, truth and folly, easy blends.
Delusive error's flicker, dimmest ray,
Is light to those that shun the blaze of day.
Could you a mountain hurl from firmest base,
The weakness of such souls you might replace.
How sweet to guileless souls! bright wisdom's
ways,
With scorn the stolid fool advice repays.
Opinion long, no one can easily change,
Too great a haste smooth action's wheels de-
range.
Increasing steady, good in patience wrought,
With fairest virtue's fruit is often fraught.
For a too philosophic, this you deem,
Assigned to folly's rant, shapeless dream.
Of fools, the number most surpassing strange,
About them still, in palace and the grange.
Of you or me, or COLMAN'S RURAL PAGE,
No man can say, without dread, peril's rage.
To arm! the Circle cries. Defend we must.
The leaders, from the cruel madman's thrust.
Fear not, my friends, the Bon Ami's host,
To naught their banner, and their silly boast.
In virtue's armor clad, be manifold foes,
Destruction hurls, on most unwary foes.
A smile derisive on their lips it steals,
And all the venom of their souls reveals.
If not to death, to silence fierce impels
Good Friend, all those immersed in folly's
spells.
—Rev. Geo. A. Watson.

ALBUM VERSES.

Dear sister, in the far off home,
I hope your thoughts oft westward roam;
And roaming there dwell most on me,
For mine are oft at home with thee,
Though distant be my dwelling place,
Remembered ever is thy face.
Sweet memory brings a vision fair,
A lovely face and glossy hair,
And most ecstatic is the sight
Of sister Mary's blue eyes bright,
And far from thee in stranger land,
In fancy rap, I clasp thy hand.
Ever more I think, that one sweet kiss,
From my dear sister, would be bliss.
My heart oft gladdens with the thought:
Her soul, for me, in love, has wrought,
I know that I have yet a part
Of my sweet sister's loving heart.
My love to manly brother dear,
Now you and mother are so near,
If Angels look from heaven above,
Our mother looks on us with love;
While by the side of heaven's gate,
Her joy to us would relate.
Most earnest may she hope and pray,
That we may tread the narrow way,
That path of peace which leads to God,
That holy path her feet have trod;
Now strive we all to meet her there,
In heaven's happy land so fair,
And join that happy Angel throng,
In one triumphant merry song,
In praises there our voices blend,
In heavenly joys that never end,
I love you more than I can tell,
But now, dear sister, fare you well.
—Schoolma'am

Scraps, From Idyll.

I hope it is not yet too late to hold up
my hands in admiration of the new dress
and improved appearance of our favorite
journal, the RURAL WORLD, or to
thank the Editor for giving us such a
handsomely printed paper. I should
have exercised my exclamatory powers
some time ago, had I not been badgered
out of prose by the critics, and driven
away from poetry by Bon Ami's terrible
treatment of my admiring friend, D. W.
H. Bon Ami, I think your missiles fell
short of their aim. I don't believe D. W.
H. ever sees the R. W.; and in explanation
of that fact, will say he has sold out
his papers and gone West—may hope to
gather some of those "glimmering
gleams" himself. I have saved up the
papers, however, and will send Bon's
"afflictions" to him as soon as I get his
new address. I think Bon Ami shows
a very jealous spirit—a sort of "dog-
in-the-manger" affair.
Fifty-Seven, I received the papers con-
taining your story, Christmas morning;
read them and sent them to another Cir-
cle member who admires you. Thanks.
I believe I owe kind nods
of recognition to several members who have
had the goodness to mention me. Some-
body calls me a jewel. I wonder if he,
or she considers me one of the real kind,
or simply a paste imitation.
Ernest (Elmo), come again; and tell us
of your home in the valley of the Ozarks.
I will always be interested in hearing
from the little boys. I, too, have a little
thirteen-year-old boy among the "Wild
hills," but he has been asleep for many
long months under the coffin-lid.
J. T., your questions are suggestive,
and I will write something soon on the
subjects you mention. I believe in amuse-
ments—in dancing, in singing—in much
which is condemned by some very good
people. We are social animals, and must
have diversion. Many people injure the
young, while young, just as much by too
rigidly excluding pleasure, as ever an
over-abundance of amusement has done.
"All work and no play," etc., you know.
I don't believe in "old heads on young
shoulders." Old heads are not always
the wisest or the best, and from my own
standpoint, I see nothing so beautiful as
a happy youth. O, let them be happy!
The instinct of play is in all young ani-
mals. God knew best, when he made them.

Nina, are you still quarreling with the
doctor about the New Year? Let him
give his version of the affair. I believe
in Men's Rights. You have a firm friend
in me, Doctor.
Beas, are you still occupying that old
wagon wheel, dreaming of the coun-
try?
Perceval commissions me to say that he
doesn't like the H. C., and has deserted
us—has gone back on the grangers. He
prefers "people of culcha" to horny
hands and homespun.
Our friend from Arkansas who didn't
like Idyll, was doubtful of Nina, has
taken unto himself a wife. So that ends
his literary labors in our behalf. I have
a warm invitation from them to visit

their home in the spring, now that the
steam engine shrieks among the hills.
I forgot to thank Bon Ami for his kind-
ly criticism of my faulty manuscript. I
shall profit by his goodness, and hope he
will point out every defect he sees. I am
truly grateful for any such help.
To-day a friend placed in my hand
Vol. I. of the Fireside Edition of Ralph
Waldo Emerson's works. Would it not
be interesting for each member, on men-
tioning an author in hand, to give us a
brief sketch of his or her life and writings?
I will endeavor to do so in this instance;
but will send as a separate article.
We are having an abundance of "beau-
tiful snow," and everybody is out enjoy-
ing it. Every delivery wagon is fringed
behind by the boys and girls and hand-
sleeds, and scarcely a vehicle of any de-
scription goes on the street but has its
share of them flying along in its wake.
And now then a man on horseback
goes galloping by, holding in his hand a
rope, the other end of which is attached
to a hand-sled occupied by a boy, who
holds another rope, attached to another
sled occupied by another boy, who also
holds another rope, etc., *ad infinitum*, *ad
stringitum*, an! lo! the end is not yet.

Good Health.

ALCOHOL FOR BURNS AND SCALDS.
—The Journal of Chemistry tells us to sa-
turate a soft fabric with alcohol, lay it
over the burn, then cover it with cotton
or finely picked oakum. This is the most
cleansing dressing that can be adopted. It
may be thought that alcohol applied to a
burn will produce more pain; but try it
and you will be agreeably surprised to
observe how quickly it will allay the
pain. Subsequently disturb the dressing
as little as possible; wet the dressing oc-
casionally with alcohol, and the result
you will find better than by any other
method.

INDIAN MEAL PUDDING.—Boil 2 quarts
of milk; while it is heating, mix to-
gether a teacup of corn-meal and enough
molasses to moisten it all. Pour the boiling
milk on this, let it stand until partially
cool, add a half teacup of cold milk, and
bake two hours in a stove, or all night in
a brick oven. It is improved by adding
sweet cream when eaten.

CUTS AND WOUNDS.—If the blood
comes from a wound in jets or spurts, be
spry, or the man may die in a few min-
utes, because the artery is severed; tie a
handkerchief closely around the part
between the wound and the heart; put
a stick between the handkerchief and
skin, and twist it around until the blood
ceases to flow; keep it there until the
doctor comes; if in a position where the
handkerchief cannot be tied, press the
thumb on a spot near the wound between
the wound and the heart; increase the
pressure until the bleeding ceases, but
do not lessen the pressure for an instant
before the physician arrives, so as to glue
up the wound by coagulation, or cooling
of the hardening blood.

Milk for Typhoid Fever.

Surgeon-General Barnes, about three
years ago, heard of an allopathic physi-
cian in Virginia, who, it is alleged, never
failed to cure typhoid fever. As there
were many patients in the United States
army dying with that disease, General
Barnes concluded to visit the ancient Vir-
ginia doctor and learn how he treated his
typhoid patients. When he met the old
gentleman, General Barnes inquired:
"What is the mode of treatment by which
you succeed?" "Why," replied the vener-
able physician, "it's the simplest thing
in the world. All you've got to do is to
get the patients' stomachs in good order
and then diet them on buttermilk; that's
all. I never lose a patient, if he isn't in
collapsed condition when I get to him."
Surgeon-General Barnes tells me that he
adopted the buttermilk treatment among
the soldiers in the army and has found it
most efficacious. If it were not for the
ten years ago the medical scientists of
France and Russia compared notes as to
the use of plain sweet milk in the treat-
ment of their hospital typhoid patients,
and concurred in the decision that milk
not only has a wonderful efficacy in ty-
phoid cases, but in the treatment of
fevers generally. An eminent medical
man, a professor in a New York eclectic
medical college—Dr. Newton—Informed
your correspondent a few weeks before
he died (his death took place about a
year ago) that he had found to be sub-
stantially true all that is set forth relative
to plain sweet milk and buttermilk,
and that the latter "acted like a charm
in cases of nervous debility. It is a great
blessing—this discovery," said he.—*Balti-
more Day.*

THIS AND THAT.

Salina, Kansas, claims an 80-pound hal-
l-stone.
The Ohio penitentiary paid a profit to the
State of \$16,000 in 1882.
Use Wise's Axle Grease on inflammatory sores
of all kinds.
The charity ball at the Academy of Music,
New York city, recently, netted \$12,000.
The Church of England has an income of
\$22,625,000.
"Dr. Benson's Celery and Chamomile Pills,
are worth their weight in gold in nervous
and sick headache."—Dr. H. H. Schlichter, of Bal-
timore.
The press is warranted in its cry for safe
steamships. During the last five years 20,763
persons have perished at sea.
Colorado has contributed \$90,000,000 in gold
and \$90,000,000 in silver to the world's stock
of precious metals.
The Howe Scales took first premium at Phil-
adelphia, Paris, Sydney and other exhibitions.
Borden, Sellick & Co., Agents, St. Louis.
During the past year 948,000,000 feet of logs
were rafted down the Mississippi, or 40,000,000
more than in 1881.
Philadelphia has a prophet who calls him-
self the second Elisha, and who prophesies
the end of the world in 33 years.
Mrs. E. Webb, Bethany, Mo., says: "Four
bottles of Brown's Iron Bitters cured me of a
distressing and prolonged attack of dyspep-
sia."
Over 1,000,000 carriages are made in the
United States every year.
Dr. Foote's Health Monthly advises people
not to "attempt to cool off quickly when over-
heated; many a fatal 'cold' has been caught
by so doing."
CRUMBS OF COMFORT.—Ear ache, tooth ache,
head ache, neuralgia, and deafness can be in-
stantly relieved and finally cured by Johnson's
Anodyne Liniment. Get a bottle and read direc-
tions.

The longest span of telegraph wire in the
world is about 6,000 feet. It unites two hills—
one on each side of the river Kishna, in India.
The annual cheese product of the United
States, for an average good season, is now es-
timated at 400,000,000 pounds, and the butter
product at 1,200,000,000 pounds.

It is a good rule to accept only such medi-
cines as have, after long years of trial, proved
worthy of confidence. This is a case where
other people's experience may be of great
service, and it has been the experience of
thousands that Ayer's Cherry Pectoral is the
best cough medicine ever used.

The will of Jonathan Tremaine Wells, a New
York miser worth \$600,000, which is being con-
tested, gives employment to twenty-six law-
yers.
It is impossible to disguise the fact that the
Vegetable Compound, prepared under the per-
sonal direction of Mrs. Lydia E. Pinkham,
with the superior science and art of modern
pharmacy, is the most successful medicine for
female debility, and diseases hitherto known.

Many orchards in California are leased to
Chinamen, who pay the highest prices, but by
their economical management generally come
out whole.

Lord Roke, Governor-General of Canada,
and party, have been the guests of the British
Minister, and have been entertained at
dinner by the President.
40,000 HORSES are bought and sold annually
by seventeen of the leading dealers of New
York and Chicago, who unanimously declare
that the one-half and three-fourths blood
Pecheron-Normans have more style, action,
best endurance on pavements, and sell for more
money than any other class of horses on the
market.—*Chicago Tribune.* Nearly 1,000 of
this popular breed have been imported from
France by M. W. Dunham, Wayne, Ill.

A large trade in new American cider has
sprung up between New York and Liverpool.
The English article is inferior and brings a
less price than the American.

A strange hair-pin which a wife testified to
finding in her husband's bed, supplied the
conclusive evidence with which she obtained a
divorce in a New York court.

"FEMALE COMPLAINTS." Dr. R. V. PIERCE,
Buffalo, N. Y.: "Dear Sir—I was sick for six
years, and could scarcely walk about the
house. My breath was short and I suffered
from pain in my breast and stomach all the
time; also from palpitation and an internal
fever, or burning sensations. I also suffered
from pain low down across my bowels and in
my back, and was much reduced in flesh. I
have used your 'Golden Medical Discovery' and
'Favorite Prescription,' and feel that I am
well.
Very respectfully,
DEILAH B. McMILLAN.
Arlington, Ga.

The reward of performing one duty is the
power to perform another.
No denunciation is so eloquent as the final
influence of good example.

Above all things always speak the truth.
Your word must be your bond through life.
(Halibuton).

Always speak politely and kindly to your
help, if you would have them do the same to
you.

Good breeding consists in having no par-
ticular mark of any profession, but a general
elegance of manners.

Highly colored urine, with backache,
headache and general debility, can in-
variably be traced to unnatural condition
of the liver, which can be removed by
using Home Sanative Cordial.

DARBY'S Prophylactic Fluid.

For the prevention and treatment of Diph-
theria, Scarlet Fever, Small Pox, Yellow Fever,
Typhoid, etc., etc.

The free use of the Fluid will do more to ar-
rest and cure these diseases than any known
preparation.

DARBY'S PROPHYLACTIC FLUID,
A safeguard against all pestilence, infection
and epidemic.

Also, as a Gargle for the Throat, As a Wash
for the Person, And as a Disinfectant.

A CERTAIN REMEDY AGAINST ALL CON-
TAGIOUS DISEASES.

It neutralizes at once all noxious odors and
gases. Destroys the germs of disease and
prevents their propagation. It is impervious
to the air, or such as have effected a lodgment
in the throat or on the person.

A certain remedy against all contagious
diseases.

Perfectly Harmless, used Externally or In-
ternally.

J. H. ZELIN & CO., Proprietors.
MANUFACTURING CHEMISTS, PHILA.
Price, 50c per bottle; pint bottles, \$1.

SCROFULA

and all Scrofulous Diseases, Sores, Erysipelas,
Eczema, Boils, Carbuncles, Pimples, etc.,
result of an impure state of the blood. To
cure these diseases the blood must be purified
and restored to a healthy and natural condition.

ATZEL'S SARSAPARILLA has for over forty
years been recognized by eminent medical
authorities as the most powerful blood purifier in
existence. It cleanses the system from all four
humors, enriches and strengthens the blood,
removes all traces of mercurial treatment, and
restores a complete master of all scrofulous
diseases.

"Some months ago I was troubled with scrofulous
sores (ulcers) on my legs. The limbs were
very swollen and inflamed, and the sores dis-
charged large quantities of offensive matter.
Every remedy I tried failed, until I used ATZEL'S
SARSAPARILLA, of which I have now taken three
bottles, with the result that the sores are healed,
my general health greatly improved. I feel
very grateful for the good your medicine has done
me.
Yours respectfully,
H. A. O'BRIEN.
148 Sullivan St., New York, June 24, 1882."

AYER'S SARSAPARILLA
stimulates and regulates the action of the diges-
tive and assimilative organs, renews and strength-
ens the vital forces, and speedily cures Rheuma-
tism, Catarrhs, Neuralgia, Menstrual Gout, General
Debility and all diseases arising from an impover-
ished or corrupted condition of the blood and
weakened vitality.

It is incomparably the cheapest blood medicine,
on account of its concentrated strength and great
power over disease.

PREPARED BY
Dr. J. C. AYER & CO., Lowell, Mass.
Sold by all Druggists; price \$1, six bottles for \$5.

**PARKER'S
HAIR BALM**
A beneficial dressing
preferred to similar arti-
cles because of its puri-
ty and rich perfume. It
restores to Gray Hair
the Youthful Color &
prevents dandruff and
falling of the hair.
Sole & S. H. H. & Co., N. Y.

**FLORESTON
COLOGNE**
Exceeds the finest flower extracts in richness. Delicately
perfumed. No odor. It is the only FLORESTON
TOM Cologne of the kind. It is sold in every
label. 25 and 50 cts., at druggists and dealers in perfum-
ery.

THE CELEBRATED "KIDNEY - WORT"

THE SPECIFIC FOR KIDNEY DISEASES,
LIVER TROUBLES, CONSTIPATION,
PILES, FEMALE WEAKNESSES
AND RHEUMATISM.

PHYSICIANS ENDORSE HEARTILY.

"I have found Kidney-Wort to work like a
charm, doing all that is claimed for it. After
using it several years in my practice, I a reg-
ular physician, can endorse it heartily. It has
done better than any remedy I ever used."
—R. K. Clark, M. D., South Hero, Vt.

DANGEROUS KIDNEY DISEASE.
"A stroke of paralysis prostrated me, also
dangerously diseased my kidneys. The doc-
tors failed, but Kidney-Wort cured me."
—E. Slade, 18 Blackstone St., Boston, Mass.

"My kidney troubles had lasted for 8 years.
I often passed blood. Kidney-Wort cured me."
—Michael Coy, Montgomery Center, Vt.

KIDNEY DISEASE AND RHEUMATISM.
"Two of my friends had my trouble," says
Mr. Elbridge Malcolm, of West Bath, Me. "I
was given up to die, by my physician and
friends. We all had kidney disease and rheu-
matism. Mine was of 30 years standing. Kid-
ney-Wort had entirely cured all three of us."

"I had kidney troubles for many years. Kid-
ney-Wort cured me."—J. M. Dow, of Diebold
Saw Co., 122 Canal St., New Orleans.

CURED AFTER 20 YEARS.
"I devoutly thank God that I found out the
virtues of Kidney-Wort," writes C. P. Brown,
of Westport, N. Y. "It has cured me of a 20
years case of terrible kidney disease."

KIDNEYS, LIVER AND CONSTIPATION.
"The most satisfactory results," writes Jas.
F. Reed, of St. Acton, Me., "in case of kidney
and liver troubles and constipations, have
followed from the use of Kidney-Wort, by
members of my family."

KIDNEY TROUBLES AND RHEUMATISM.
"My attending physician gave me up. I had
rheumatism and kidney troubles for 30
years. Many doctors and medicines reme-
died me no good. My friends, too, thought my
death was certain. Kidney-Wort has entirely
cured me."—J. M. Dow, of Diebold
Saw Co., 122 Canal St., New Orleans.

LIVER DISORDER.
"Please tell my bro, soldiers, and the public,
too," appeals J. C. Power, of Trenton, Ill.,
through the St. Louis Globe-Democrat, and
Firebrand, that Kidney-Wort cured my liver dis-
orders, which I had for 20 years."—12-2-82.

RHEUMATISM.
"I have tried a great number," truly remarks
Mr. W. S. Grose, of Scranton, Pa., under date
of Dec. 12, '82, "but there is no other remedy
like Kidney-Wort, for curing rheumatism and
diseased kidneys."

INFLAMMATION OF BLADDER.
"Chronic inflammation of the bladder, two
years duration, was my wife's complaint,"
writes Doctor C. M. Summerlin, of Sun Hill,
Ga. "Her urine contained crystals, mucus, pus,
and was sometimes bloody. Physicians pre-
scriptions—my own included—and domestic
remedies only palliated her pains. Kidney-
Wort, however, has entirely cured her."

INTERNAL PILES.
"I had internal piles for several years," said
J. B. Meyer, of Myerstown, Pa. "Nothing
helped me except Kidney-Wort. It cured me."

LADIES' TROUBLES.
Respect the confidence reposed in you by
ladies. "It has helped me in intricate dis-
eases," writes Mrs. Annie Rockbold, of Jarretts-
ville, Md. "The lady correspondent wrote me
about Kidney-Wort's curative effects."

RHEUMATISM.
"Nothing else would," tersely says Justice J.
G. Jewell, of Woodbury, Vt., "but Kidney-Wort
did cure my three years' rheumatism."

DYSPEPSIA.
Our correspondent, Mr. Joseph Kenney, of
Landisburg, Pa., says: "Kidney-Wort cured my
dyspepsia. I had it in its worst form too."

A WILLING OATH.
"I will swear by Kidney-Wort all the time,"
writes Mr. J. R. Kauffman, Lancaster, Pa. (All
its patrons do the same, Mr. K.)

DELICATE COMPLAINTS.
Another lady, Mrs. J. B. Clark, Amitee City,
La., writes us: "Kidney-Wort has cured me of
habitual constipation, pain in the side, as well
as some other delicate complaints."

**THE CELEBRATED
HOME SANATIVE**

CORDIAL.

This is a medicine prepared from the origi-
nal formula, the best elixir of calumina and
iron tincture. It purifies the blood, corrects
nervous and female disorders, cures chills,
fevers and dyspepsia, restores the appetite
and loss of sleep. The best preventive of
injuries, and all kinds of malaria, known to the
public. Its sale as a medicine is recommended
by more prominent physicians than any
other tonic, and it is sold without paying a United
States liquor dealer's license. Prepared by
the ST. LOUIS WINE CO., Nos. 24 and 26 North
Main Street, St. Louis, Mo.
For sale by druggists and dealers generally
throughout the country.

Carolina Tonic,
FOR PULMONARY DISEASES AND GENERAL
DEBILITY.

SURE CURE FOR MALARIA.
Sure cure for Dyspepsia in all its stages;
also Coughs, Croup, Bronchitis, Asthma,
and all diseases of the Throat and Lungs;
and the only remedy that is beneficial in
malarial climates. This is a preparation of
BAXTER'S Tonic, Rock Candy, Magnesia, and
other medicinal ingredients in above dis-
cussed, the basis being the purest Rice and Rye Whis-
ky. This Rice Whisky is commonly known
as Arrack in the South, and as Samsong in
China. It has been used for many years by
the Chinese, and is highly valued by the negro
laborers in the Southern rice fields, as the only antidote
for malaria and rice fever.

We guarantee a positive cure in every case.
Harmless and very pleasant to take. Try it.
For sale by all druggists and grocers at
10c per quart bottle. The trade supplied at
discount by Meyer Bros. & Co., wholesale
druggists, and Brookmire & Ranken, whole-
sale grocers, St. Louis, Mo.

Discount by Meyer Bros. & Co., wholesale
internal revenues medicinal, subject only to
the stamp tax, which does not subject the
vendor to license as liquor dealer.

HENRY BISHOP & CO.,
New York and Charleston, S. C., Sole Manu-
facturers and Proprietors.

**TURKISH BATH
ESTABLISHMENT,**
311 N. Seventh St., Between Olive and Locust.
Geo. F. Adams, M. D., SUPT.

FOR LADIES:—Monday, Thursday and Sat-
urday mornings from 9 a. m. to 12 m.
FOR GENTLEMEN:—From 7 a. m. to 9 p. m.,
excepting the above hours for ladies.
SUNDAYS:—Gents from 7 a. m. to 12 m.

SAWMILLS
THE AULTMAN & TAYLOR CO., Mansfield, Ohio

Granite Ironware.

FOR BOILING, BAKING,
BOILING, PRESERVING.
IS LIGHT, HANDSOME,
WHOLESALE, DURABLE.

The Best Ware Made for the Kitchen.

MANUFACTURED ONLY BY THE

ST. LOUIS STAMPING COMPANY, ST. LOUIS.

For Sale by all Stove, Hardware, and Housefurnishing Dealers.

KEMP'S MANURE SPREADER,
Pulverizer & Cart Combined.

One load put out by the Spreader will do
as much good to the present crops as
two ordinarily spread by hand.

The great
cost of labor in
the West, and the
fact that the
Spreader is so
easy to use, and
so effective, has
caused it to be
used by over 40,000
farmers, from Maine
to Texas, Florida, Cuba,
Canada and Germany,
everywhere where
manure is used, and
it is the best and
most economical
method of spreading
manure by hand.
It covers every inch of
ground with finely pul-
verized manure, insuring
rapid growth and uni-
form crops. Its quality
of work not approached
by hand labor at ten times
the cost. Will save its
cost in one season,
and the testimony of
best farmers in every
State, saying they never
used a better spreader.
Illustrated catalogue free,
address—

KEMP & BURFEE MFG. CO., St. Louis, Mo.

H. REINSTEADLER, St. Louis, Mo., General Agent for Missouri.

**FURST & BRADLEY
MANUFACTURING CO.
CHICAGO, ILL.**

DAVID BRADLEY, Pres. JOS. HARLEY BRADLEY, Sec. & Treas.
BYRON C. BRADLEY, Supt.

We manufacture the following named Goods, and we believe every
farmer will consult his own interest by examining them before
purchasing any others.

Steel Walking Plows Of best possible shape for shedding the dirt
HARD-TENDED of any make, and for light draft; also, the most UNIFORM

"Bradley" Walking Cultivators With our PATENT SPRING. These
Springs are the only ones so arranged
that their force operates to help raise the plows and to hold them up when
rising, without interfering with their normal operation when in the ground.
Farmers, don't forget this, for it is a very desirable feature.

Sulky Hay Rakes (Hand Dump) Containing twenty best oil-tempered
more than others, and are consequently stronger and less liable to break.
Lever Rake to the Plow,
leaving the pole as free as on a wagon.

**Gang Plows, Harrows, Double and Single Shovel Plows,
Field Rollers, Scrapers, etc., etc.; also, a full line of
"Furst & Bradley" Chilled Plows.**

OFFICE: 63 N. Desplaines St., Chicago, Ill.
FURST & BRADLEY MFG. CO., St. Louis, Mo.
FURST & BRADLEY MFG. CO., Indianapolis, Ind.
FURST & BRADLEY MFG. CO., Kansas City, Mo.
DAVID BRADLEY & CO., Council Bluffs, Iowa.
DAVID BRADLEY & CO., Minneapolis, Minn.

STILL HOLDS THE LEAD
10 Years' Practical Use.
BARNES' WIRE CHECK ROWER.
First and Only Entirely Successful Wire
Check Rower ever Invented.

Popular because Simple and Easy to Operate. Ten years practical use has proven the success of the
Barnes' Check Rower beyond question. It has the lead with the dealers and the farmers, who have ren-
dered an unanimous verdict that it is the best Check Rower made. The following are the advantages
over any other Check Rower, and all claims are established by actual use.
Use of wire in place of a rope; and that one wire will outlast two ropes.
The wire will not stretch and shrink like a rope.
The wire does not break the machine, as a GREAT WEAR AND STRAIN ON THE
WIRE, and friction on the pulleys, and making a wire that does not cross the machine outward several
wires that do cross.

CLOSES ON OUTSIDE OF NOSE.

The Stock Yards.

Weekly Review of the Live Stock Market.

WEDNESDAY, Feb. 14th, 1883—2 p. m.

CATTLE—Light butchers cattle were active and firm. There was an active inquiry for stockers and feeding steers. Market for shipping cattle opened slow, but ruled steady, and closed active. Pens were cleared of all cattle that were here before 11 a. m. Receipts liberal. Representative sales:

22 native steers.....	981	\$4.70
19 native steers.....	1107	4.70
20 native butchers.....	765	4.35
18 native butchers.....	838	4.35
12 native cows.....	933	3.75
18 native stockers.....	795	3.05
17 mixed butchers.....	955	5.00
27 native steers.....	1255	4.35
17 native steers.....	1436	5.30
16 native steers.....	1400	5.30
15 native steers.....	1319	5.25
19 native steers.....	1145	4.90

HOGS—Market opened slow, but ruled steady on good to best heavy, which sold at \$6.70 to \$6.95. Mixed packing sold at \$6.50 to \$6.75 for fair to good, but common packing and coarse heavy sold 5c to 10c lower, at \$6.25 to \$6.45. Light hogs averaging 180 to 210 lbs sold at \$6.40 to \$6.50, and ruled fairly active and firmer. About all sold. Representative sales:

71.....	253	\$6.05
64.....	221	6.80
37.....	232	6.80
19.....	186	6.50
25.....	172	6.40
53.....	270	6.50
15.....	220	6.80
24.....	247	6.80
50.....	241	6.70
50.....	328	6.50

SHEEP—Market dull and dragging, with but little inquiry for any kind of sheep outside of the limited local demand. Receipts are mainly common. Sales:

75.....	100	\$3.50
100.....	120	3.50
140.....	108	4.37
79.....	110	4.75

THURSDAY, Feb. 15, 1883.

CATTLE—There was a good supply of cattle on the market this morning, and trade opened slow on account of the derangement in shipping facilities eastward caused by high water. Market was a shade easier on light butchers cattle under liberal supply, but all offering were sold by noon. Shipping cattle ruled fairly active after the market opened, and ruled firm at yesterday's to extent of supply at noon. There was an active inquiry for stockers and feeding steers. Representative sales:

No.	Description.	Av.	Price.
12	native butchers.....	856	\$4.37
12	native cows-heifers.....	1091	3.90
18	native cows-heifers.....	871	3.70
16	native steers.....	1148	4.80
23	native stockers.....	894	4.15
18	native steers.....	1214	4.90
16	native butchers.....	855	4.35
17	native steers.....	1156	4.90
18	native steers.....	1231	5.00
17	native steers.....	1464	5.50

HOGS—Market opened slow, but ruled a shade easier on good heavy, which sold at \$6.70 to \$6.90 for choice to best. Packing hogs sold about 5c lower than yesterday, and ruled about \$6.45 to \$6.65 for fair to good, and common packing and coarse heavy sold at \$6.25 to \$6.40. Light hogs averaging 180 to 210 lbs sold at \$6.35 to \$6.45. Light Yorkers and fat pigs sold at \$6.00 to \$6.30. All sold. Representative sales:

43.....	171	\$6.35
60.....	143	6.10
26.....	302	6.10
24.....	280	6.50
40.....	238	6.50
36.....	191	6.50
34.....	241	6.50
58.....	245	6.50
68.....	247	6.50
16.....	171	6.25
17.....	142	6.00

SHEEP—Market slow, inquiry mainly confined to choice fat wethers, and the common grades are neglected. Sales:

42.....	100	\$3.75
75.....	100	4.25
80.....	90	4.25
100.....	134	5.25
68.....	80	5.25
60.....	90	5.25

FRIDAY, Feb. 16, 1883—2 p. m.

CATTLE—Market for shipping cattle was fairly active under moderate receipts, and all sold early in the day at steady prices. Butchers cattle were active under light receipts. The only trouble feared was lack of transportation, as we had but one road, the I. & St. L., that could take stock out. The C. & A., Wash, and Vandalia, and O. & M. roads all washed out in the interior of the State by freshets. The C. & A. took out a train of stock, but had to return to the yards to unload. Representative sales:

25 native butchers.....	884	\$4.60
20 native butchers.....	1039	4.40
20 native steers.....	1111	4.80
16 native butchers.....	890	4.25
16 native steers.....	1204	4.30
14 native steers.....	1263	5.37
16 native steers.....	1191	4.70
18 native steers.....	1323	5.30

HOGS—Market opened slow, but ruled firm on good to best heavy, which sold at \$6.70 to \$6.85 for choice, some that were extra sold at \$7.00. Packing hogs were dull and nominal at \$6.40 to \$6.65 for fair to good, and \$6.25 to \$6.40 for common packing and coarse heavy—weather warm, raining most of the day. Light hogs averaging 180 to 210 lbs sold about 10c higher than yesterday, at \$6.40 to \$6.55. Light Yorkers and fat pigs sold at \$6.00 to \$6.35. Representative sales:

75.....	193	\$6.45
4.....	304	6.85
40.....	198	6.00
12.....	168	6.30
27.....	208	6.50
61.....	217	6.60

SHEEP—Pens came nearer being cleared than any time in the past two weeks, all sold except two cars of lamb ewes. Market for fair to good sheep was active and a shade firmer. Sales:

98.....	108	\$4.50
88.....	101	4.50
91.....	100	4.00
98.....	108	4.50
86.....	57	4.00

MONDAY, Feb. 19, 1883—2 p. m.

CATTLE—Market for shipping cattle was active, and pens were cleared early at 10c to 15c higher prices than ruling at the close of last week. The railroad tracks damaged by the freshets last week are about all repaired, and stock trains eastward are again running regularly.

An active demand for stockers and feeding cattle.

Light butchers cattle were scarce and sold a shade higher than at the close of last week.

Good to choice fresh milch cows were wanted.

Representative sales:

45 native butchers.....	955	\$4.50
43 native butchers.....	945	4.80
15 native cows.....	1085	4.50
15 native cows.....	1186	4.25
10 native cows.....	856	4.00
19 native butchers.....	928	4.00
14 native cows.....	1118	4.00
16 native steers.....	1270	5.25
15 native steers.....	1273	5.25
32 Colorado steers.....	1310	5.25
161 Texas steers.....	929	4.05

HOGS—Receipts were inadequate to supply the local butchers demand. Quality were mainly fair mixed packing—which were quoted at the close of last week at \$6.50 to \$6.70—but they sold to butchers this morning at \$6.80 to \$7.00 in the absence of better hogs.

We quote the market as 10c to 15c stronger.

Good to best heavy \$6.85 to \$7.00. Fair to good

packing \$6.50 to \$6.80. Yorkers \$6.50 to \$6.65.

Representative sales:

32.....	216	\$6.70
12.....	147	6.50
57.....	289	7.00
10.....	170	6.40
54.....	235	7.00
57.....	251	6.70
19.....	236	6.90

SHEEP—Market is slow, but firmer than at the close of last week. There is a fairly active inquiry for fair to good sheep, but all lamb ewes are neglected. 102 sheep at 117lbs sold this morning at \$3.65.

TUESDAY, Feb. 20th, 1883. Receipts for 24 hours.—Cattle 427, hogs 1,151, sheep 424.

CATTLE—Only fifteen loads entered holders to obtain all that was secured on Monday in the butcher branch and in instances a shade more, but light supply had much to do with it; the general market of the country was a little easier, and the shipping buyers even had declined to add to Monday's rates. Representative sales:

13 southwest steers.....	1007	\$4.80
30 southwest steers.....	1056	4.90
32 native steers.....	1218	5.37
30.....	1216	5.30
71 native steers.....	1133	5.20
63 native steers.....	1224	5.40
26 Texas steers.....	1103	4.15
30 Texas steers.....	1003	4.00

HOGS—Again a light run and a hungry set of butchers; mixed lots of heavy hogs only fair in quality sold up to \$7.10 and buyers readily have paid \$7.25 for quality. We quote Yorkers \$6.65 to \$6.85, packing \$6.50 to \$6.90, good to choice butcher hog \$6.80 to \$7.25; pigs, thin skips etc., \$6.00 to \$6.50. Representative sales:

45.....	271	\$6.95
50.....	253	7.05
50.....	251	7.05
32.....	216	6.70
57.....	212	6.80

SHEEP—Business was good, all that came in were wanted and sold readily at good prices; fair to good sheep first to sell at \$4.50 to \$5.25; extra \$5.50 to \$5.75; medium \$3.75 to \$4.25; common \$3.45 to \$3.75. From 20 to 40 cents better than last week on bulk of sales. Representative sales:

SHEEP—Business was good, all that came in were wanted and sold readily at good prices; fair to good sheep first to sell at \$4 50@5 25; extra \$5 50@5 75; medium \$3 75@4 25; common \$3@3 75. From 20 to 40 cents better than last week on bulk of sales. Representative

GENERAL MARKET.

WHEAT—No. 2 cash \$1.13; No. 3 \$1.08; No. 4 bid \$1.01.

CORN—No. 2 mixed, cash 55c; No. 2 white mixed, cash 55c; No. 2 cash 55c.

OATS—No. 2 cash 35c.

Wheat grades and futures were all broke down yesterday in prices, and closed on the afternoon board at the lowest of the day, and all so low as to indicate new views of weather influences. There was only a small movement in sales, but a fair dealing in future all round, and specially in the March, April and May options; and notable in the latter as compared with Saturday. The market for futures was quite unsettled and fluctuating, but the decline was established and closing practical prices were as above.

Corn accompanied wheat from similar causes and sympathy in a heavy decline. There was an increased movement in grades from the lower market values descended to, and sales of them were the freest and most extensive for some time. There was a light milling demand for No. 2 white mixed, but there was more selling than of late. Futures lower to the close.

Oats grades and futures lower too, and the former sharply so. Not an active market. Futures lower and closed lower to sell on the afternoon board. May option as in wheat and corn, the prevailing speculative field.

BUTTER—Market quiet. Other than a fair demand for choice stock from the local trade little doing. We quote: Creamery—Selections 37c to 38c, seconds 36c to 37c. Dairy—Choice to fancy 29c to 30c occasionally a shade more in a small way; fair to good 26c to 28c; medium to fair 24c to 25c; common 14c to 18c; Northern roll unchanged at 21c to 22c; off grades range at 17c to 20c. Near-by makes—Choice wrapped in good request and steady at 15c to 16c, but the largest part of the receipts is common white stock, which drops at 12c to 14c.

CHEESE—Mild late make full cream 12c to 14c; mild to choice part skims 7c to 8c; inferior 3c to 4c.

EGGS—Receipts for past 48 hours (as given by the Merchants' exchange) only 143 packages, and market higher in consequence, yet the demand was light and the feeling weak at the advance; light sales in job lots (early) at 28c that asked later, with 2c bid for fresh.

DRESSED POULTRY—Market bare of all descriptions, and demand moderate, but prices nominally higher. We quote: Turkeys 14c to 15c per lb for fair, to 16c for choice; chickens—small and rough 11c to 12c; in size and condition; good to choice 12c to 13c; fancy 13c to 14c; medium 14c to 15c; choice 15c to 16c; ducks—small and scrubby 13c to 14c; good to choice 15c to 16c.

HAY—The best grades of both timothy and prairie very scarce and the market firmer than usual. Improved demand; other descriptions remain without change. Sales: First side 2 cars common red top mixed at \$8.50; 1 good and 1 clover mixed at \$10; 2 prime timothy at \$11; 2 strictly prime at \$12; 1 choice at \$14. This side—2 cars nondescript at \$6 to \$7; 4 prime prairie at \$8 to \$9; 2 choice to do at \$9; 1 fancy do at \$9; 4 low clover mixed at \$9 to \$10; 2 prime clover mixed at \$10 to \$11; 4 prime to strictly prime timothy at \$13 to \$15; 2 choice to choice at \$15 to \$16; 2 fancy \$16.

POTATOES—Choice stock in scant supply and firm at 90c to 97c—fancy (burbank, beauty of hebron, early Ohio, etc.) worth more, and inferior to fair at 60c to 85c. Sales: 2 cars rose at 92c, 2 cars choice do (sacked) at \$1, a few wagon loads at 90c to 95c.

SWEET POTATOES—Slow. We quote: Red banded at \$3.50, banded at \$1 per bbl in shipping order; Southern yams dull at \$2.30 per bbl. Sale: 17 bbls yellow nomenclature (from first hands) at \$2.50 per bbl.

ONIONS—Easier under larger receipts, but prices not quotably lower. Sales: Yellow—1 car bulk at 75c, 2 cars do at 80c, 3 car in bbls at \$2.25 per bbl—foregoing dull; red—25 sks at 85c, 1 car choice in bulk at 90c.

WHITE BEANS—In light supply and fair demand; navy in best request—wanted for seed. Country at \$1.00 to \$1.25; Eastern jobbing only—screened medium \$2.50, do navy \$2.05, hand-picked medium \$2.50 to \$3.00, do navy \$2.00 to \$2.25.

APPLES—Demand limited. Choice genuine and firm red varieties steady in price; while soft, speckled, &c., are dull and nominal. We quote, sound: Ben Davis \$3.75 to \$4; winesap \$3.25 to \$3.50; gentling \$3.25 to \$3.50; romanite \$2.75 to \$3—fancy more; inferior nominal at \$1.50 to \$2.50. Sale: 25 bbls gentling at \$3.50.

DRIED FRUIT—In steady demand and firm. Apples—Dark 7c to 7c, fair 7c, prime 8c to 8c. Peaches—Mixed or low halves 6c to 6c, fair halves 6c to 7c, prime bright 7c to 7c. Light sales at quotations.

COTTON SEED AND MEAL—Seed quotes at

\$13.50 on the level. Meal \$20 a ton in car-load.

SALT—Lake nominal at \$1.50 to \$1.60 bbl.

BROOM CORN—Choice green hurl in demand; all else neglected: crooked at 2c to 3c, fair 3c to 4c, prime 4c to 5c, strictly prime 5c to 6c, choice long green 6c to 7c.

HONEY—Dull and weak, comb at 14c to 16c, strained 6c to 7c, extracted 7c to 8c in lots in small packages more.

THE SEED MARKET.

Retail prices, St. Louis, February 19, 1883.

Red Clover.....	50 lbs.....	\$ 7.75
Snapling Clover.....	50 lbs.....	8.25
Alfalfa.....	50 lbs.....	9.00
White Dutch Clover.....	50 lbs.....	12.00
Timothy.....	50 lbs.....	1.90
Red Top.....	50 lbs.....	1.45
Orchard Grass.....	50 lbs.....	1.45
Blue Grass, Extra Clean.....	50 lbs.....	1.40
Meadow Fescue.....	50 lbs.....	1.40
English Lawn Grass.....	50 lbs.....	1.40
Hungarian Grass.....	50 lbs.....	1.40
Millet.....	50 lbs.....	1.25
German Millet.....	50 lbs.....	1.25
Sorghum Seed.....	50 lbs.....	1.50
Broom Corn.....	50 lbs.....	1.50
Osgood Orange.....	50 lbs.....	1.50
Castor Beans.....	50 lbs.....	1.50
Hemp, prepared.....	50 lbs.....	2.50
Cow Peas.....	50 lbs.....	1.50
Barley.....	50 lbs.....	1.50
Saint Chas. White Corn.....	50 lbs.....	90
Galena Yellow Corn.....	50 lbs.....	90
Brown Oats.....	50 lbs.....	48
Red Rust-proof Oats.....	50 lbs.....	90
Onion Seed, yellow, measured.....	50 lbs.....	75
Onion Seed, white, measured.....	50 lbs.....	40
Top Onions.....	50 lbs.....	3.00

ST. LOUIS AMUSEMENTS.

"The Black Flag," a thrilling melo-drama, superbly costumed, set and acted, is crowding the Grand Opera House. It is well worth seeing. Next week Miss Maggie Mitchell will begin her annual engagement.

Bartley Campbell's new play, "The White Slave," has been revived at Pope's Theatre, and has met with great success. It is a sterling play, rich in scenic effects, and is more over a good picture of southern life. It will be succeeded by the great German actress, Geisler.

The attraction at the Olympic at present, is the merry, sparkling Lotta, who has no equal in her line. The house is crowded at every performance. Haverly's Mastodon Minstrels will come next week.

The risks taken by Frank Frayne in his new drama of "Mardo," are thrilling in the extreme. He enters into cages of lions, hyenas and other ravenous animals without fear. His play is interesting and deserves its success. It will be followed by Davene's allied attractions.

CHAFF.

Leadville, also, has its Lotus Club.

The slight of milk carts drives Rochester dogs to commit hydropathy.

Everybody says, Wise's Axle Grease never gains.

"Suckling Nelsons" is Buffalo Commercial Advertiser for naval cadets.

There's one awful disadvantage about being a queen, empress or peeress—every one knows their age.

Henry P. Long, Paris, Mo., says: "I have been selling Brown's Iron Bitters for some time, and it appears to give satisfaction."

A firm in Lawrence, Mass., makes nothing but governors. "It has no patent on the tidal-wave governor," explains the Boston Commercial Bulletin.

For coughs, asthma and throat disorders, use Brown's Bronchial Troches, having proved their efficacy by a test of many years. Sold only in boxes.

While the Government attorneys in the Star Route cases get \$50 to \$100 a day, the witnesses receive the princely remuneration of \$12.50 per diem.

The most brilliant shades possible on all fabrics are made by the Diamond Dyes. Unequalled for brilliancy and durability. 10 cts.

Yes, "Romeo," you are right. If Mr. P. B. D. Vanderbilt was running that underground steam heating company he'd make it warm enough, and no mistake.

New York has begun to put telegraph wires underground.

Under the new law prescribing the cat for wife-beaters in Maryland at the end of their terms of sentence, most of the brutes would prefer to remain indefinitely in jail.

"Five doctors and no end of medicine; no relief. Dr. Benson's Skin Cure has driven away all eruptions and I'm nearly well."—J. C. Young, Hamilton, Ill.

From our linguistic and esteemed contemporary, the Chicago Inter Ocean, we are more astonished than pleased to learn that "reperity" is French for "handbook."

The editor of an agricultural paper says there is absolutely no sure cure for hog cholera, but that Sheridan's Condition Powders given occasionally will certainly prevent it. Be sure to get Sheridan's. The other kinds in large packs are trash.

Three hundred and seventy-five thousand persons work underground in Great Britain.

The daily receipt of esteemed exchanges directed to "New York Graphic" can only be explained on the theory that the Maine liquor law is not enforced in all the States.

If you want reliable seeds, send your address to Cole & B. (Seedmen), Pella, Iowa, and they will send their illustrated catalogue free.

The American Queen informs the public in this week's issue that it is not dead. The thousands of readers of that entertaining paper had not even for an instant supposed it to be asleep.

Cancers and other tumors are treated with unusual success by World's Dispensary Medical Association, Buffalo, N. Y. Send stamp for pamphlet.

A Colorado news criticism in the Gunnison News-Democrat: "The Tin Cup Banner has a poet, and such a poet! Four cords of his poetry would not be equivalent to one can of Boston baked beans."

"I have used Simmons Liver Regulator for constipation of my bowels caused by a temporary derangement of the liver, for the past three or four years, and always when used according to directions with decided benefit."—Hiram Warner, late Chief Justice of Ga.

From the Philadelphia Times is extracted the cheering intelligence that the Forty-seventh Congress already has one foot in the grave. But, see here—the Times trying to rival the Ledger in the latter's stupidity?

We are gratified to learn from the Rome correspondent of the Philadelphia Bulletin that "Christmas has come and gone." We had supposed that Christmas was coming, and it lifts a mighty weight from our pocket-book to be set right.

Ayer's Sarsaparilla is the best medicine for every one in the spring. Emigrants and travelers will find it an effectual cure for the eruptions, boils, pimples, eczema, etc., that break out on the skin—the effect of disorder of the